

CATALOG NO. 88-J
1940

THE MOST COMPLETE LINE IN THE INDUSTRY

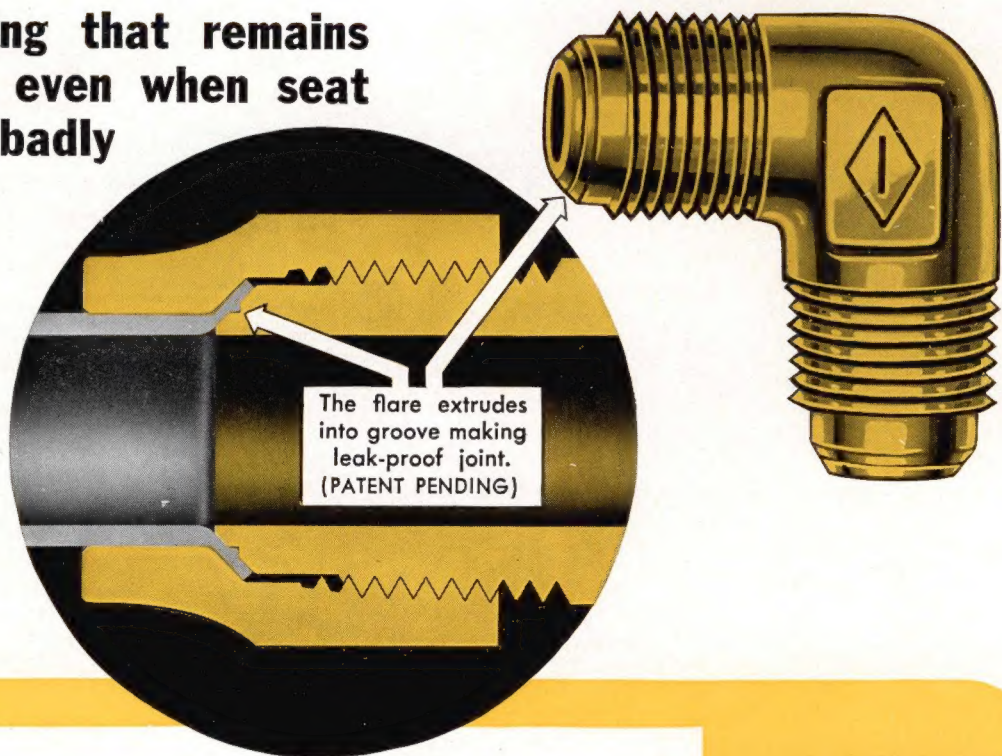


IMPERIAL

VALVES, FITTINGS, TOOLS AND ACCESSORIES
for refrigeration and air conditioning

For Greater Security **USE IMPERIAL TRIPLE-SEAL FLARE FITTINGS**

— the fitting that remains leak-proof even when seat has been badly nicked or marred



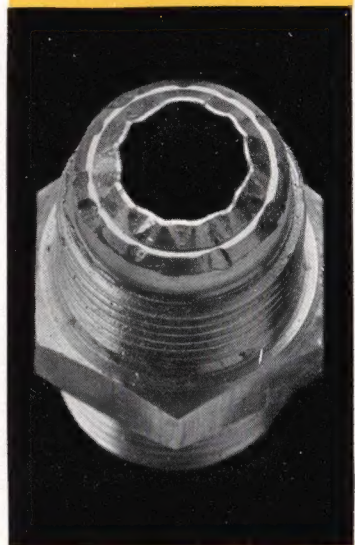
EVERY Imperial refrigeration flare fitting is now being made with a groove in the seat as shown in the diagram above. When the flare is drawn up against this groove the copper is actually extruded into the groove making a self-seating joint that will be tight even though the face of the seat may have been damaged. As a result it is unnecessary to reface these fittings if the seat becomes nicked. The self-seating feature of Imperial "Triple-Seal" Fittings assures a tight joint that will stay tight under the most severe service conditions.

These fittings also have all the other important Imperial features. Nuts, tees, elbows and crosses are made from brass forgings and will not crack or slit. These fittings are heavier and stronger than the standard S. A. E. fittings and are non-porous, eliminating seepage and season cracking. Tees and elbows have flats for wrench hold. On fittings with female threads made from rod, Imperial uses an extruded bronze rod. This extruded bronze with its higher copper content helps to eliminate season cracking found in brass rod.

There is no extra charge for Imperial Flare Fittings with the Triple Seal Groove. They are furnished in a variety of types and sizes for every need.

OTHER PRODUCTS TO HAVE TRIPLE-SEAL PROTECTION

All flared ends on Imperial Refrigeration Valves, Strainers, Dehydrators, Floats, Controls, etc., will be made with Triple-Seal Flare Connections.



• This Imperial Triple-Seal Fitting was one of a large number that were all tested under 250 lbs. pressure with Freon after the seats had been damaged. Every fitting came through this severe test without leaking. Conventional fittings without the triple-seal groove had to be refaced before they would hold Freon.

IMPERIAL REFRIGERATION VALVES

Imperial Refrigeration Valves are made of heavy brass forgings, and are non-porous, strong and uniform. The forging process makes Imperial Valves resistant to such penetrating refrigerants as Sulphur Dioxide, Ethyl Chloride, Methyl Chloride, and Freon.

Valves with flare connection have the new Imperial Triple-Seal groove.* (Complete description of this feature is given on inside of front cover.)

"SYLPAK" SHUT-OFF VALVES

Positive; dependable; meet the exacting demands of refrigeration. S. A. E. or solder fitting. Syphon principle used. Syphon may be changed, in case of rupture, with valve under pressure, without losing refrigerant. Valve will withstand pressures greater than found in refrigeration. Non-porous, strong, uniform brass forged body with two flat sides, giving substantial wrench surface. Hand wheel 2 1/4" in diameter. For complete description of "Sylpak" Valves see inside back cover.

Nos. 192-C and 192-CS

Outside Diam. of Tube	Iron Pipe Thread	List Price Each
1/4"	1/4"	\$4.00
1/4"	3/8"	4.00
3/8"	1/4"	4.00
3/8"	3/8"	4.00
1/2"	3/8"	4.00
1/2"	1/2"	6.00
3/4"	1/2"	10.00
3/4"	3/4"	10.00
3/4"	1/2" F.I.P.T.	10.00
7/8" (No. 192-CS Only)	3/4"	10.00

No. 192-C 1/2" Fem. I.P.T. x 1/2" Fem. I.P.T. Each \$10.00

No. 192-C can also be furnished with the flared and iron pipe thread connections reversed. Cat. No. 204-C. Add 20% to corresponding list price of No. 192-C series.

No. 193-C

Outside Diam. of Tube	List Price Each
1/4"	\$5.30
1/4"	5.30
3/8"	5.30
1/2"	5.30
1/2"	6.60
3/4"	13.50
1/4" Fem. I.P.T.	5.30
3/8" Fem. I.P.T.	5.30

For any other sizes add 20% to list price of largest corresponding size.

"SYLPAK" VALVE FOR ICE CREAM CABINETS AND MILK COOLERS

Made with same parts as our regular 193-C 5/8" O.D., but machined for 1/4" O.D. S.A.E.

No. 293-C With Brass Handle. List Price Each \$10.50
No. 293-C With Bakelite Handle. List Price Each 11.00

Outside Diam. of Tube	No. 193-CS	List Price Each
1/4"		\$5.30
1/4"		5.30
3/8"		5.30
1/2"		5.30
1/2"		6.60

For any other sizes add 20% to list price of largest corresponding size.

Outside Diam. of Tube	No. 207-C	List Price Each
1/4"		\$5.70
1/4"		5.70
3/8"		5.70
1/2"		5.70
1/2"		7.20
3/4"		15.70
1/4" Fem. I.P.T.		5.70
3/8" Fem. I.P.T.		5.70

For any other sizes add 20% to list price of largest corresponding size.

*Not yet available in all sizes. This feature will be incorporated as soon as tools are completed.

Valve stems are made of tobin bronze or stainless steel. Valve bodies, seats and needles are machined to great accuracy.

Base plates, when used, are made of extra heavy, cadmium plated steel. A special non-twisting feature prevents screws holding base plates to valve from shearing under strain of assembling and operating valves.

Threads are fitted with protectors to prevent damage before they are put into service.

Outside Diam. of Tube	No. 207-CS	List Price Each
1/4"		\$5.70
1/4"		5.70
3/8"		5.70
1/2"		5.70
1/2"		7.20

For any other sizes add 20% to list price of largest corresponding size.

ANGLE SHUT-OFF VALVE

For liquid receivers, manifolds, evaporator heads, or used as compressor valve. Two flat sides give substantial wrench surface to make assembly quick and easy. Complete with Hex. Brass Seal Cap. No. 41-C Wrench Wing Seal Cap can be substituted if desired. Add \$0.81 to list price on all sizes up to 3/8" O.D. On 1/2" and 3/4" O.D. add \$1.32 to the list price.

Can also be furnished with the flared and iron pipe thread connections reversed. Cat. No. 61-C. Add 20% to corresponding list price of No. 62-C series.

No. 62-C

Outside Diam. of Tube	Iron Pipe Thread	List Price Each	Outside Diam. of Tube	Iron Pipe Thread	List Price Each
1/4"	1/4"	\$2.30	5/8"	1/2"	4.30
1/4"	3/8"	2.30	1/2"	1/2"	5.60
3/8"	1/4"	2.30	3/4"	3/4"	5.60
3/8"	3/8"	2.30	1/4" F.I.P.T.	1/4" Male	2.50
1/2"	1/2"	2.30	1/4" F.I.P.T.	3/8" Male	2.50
1/2"	3/8"	2.90			

TWO-WAY LINE SHUT-OFF VALVE

For multiple installations.

Complete with Hex. Brass Seal Cap. No. 41-C Wrench Wing Seal Cap can be substituted if desired. Add \$0.81 to list price on all sizes except 5/8" O.D. On this size add \$1.32 to list price.

Outside Diam. of Tube	List Price Each	No. 63-C	No. 63-CS
1/4"	\$3.60		\$3.60
1/4"	3.60		3.60
3/8"	3.60		3.60
1/2"	3.60		3.60
5/8"	5.35		5.35
3/8" Fem. I.P.T.	5.35		

No. 63-C

No. 63-CS

For any other sizes add 20% to list price of largest corresponding size.

THREE WAY SHUT-OFF VALVE

Often called a riser valve; very popular for multiple installations. Special sizes to order. The last size given is size of branch outlet. The valve stem opens and closes branch outlet.

Complete with Hex. Brass Seal Cap. No. 41-C Wrench Wing Seal Cap can be substituted if desired. Add \$0.81 to list price on all sizes except 5/8" O.D. On this size add \$1.32 to list price.

Outside Diam. of Tube	List Price Each	No. 106-C	No. 106-CS
1/4" x 1/4" x 1/4"	\$4.00		\$4.00
1/4" x 1/4" x 1/4"	4.00		4.00
3/8" x 3/8" x 3/8"	4.00		4.00
1/2" x 1/2" x 1/4"	4.00		4.00
1/2" x 1/2" x 1/2"	4.00		4.00
5/8" x 5/8" x 5/8"	5.90		5.90
3/8" Fem. I.P.T.	5.90		

No. 106-C

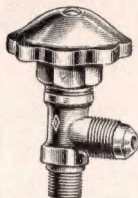
No. 106-CS

For any other sizes add 20% to list price of largest corresponding size.

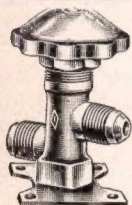
BACK SEATING ANGLE SHUT-OFF VALVE

This is one of the most popular valves for refrigeration work. When the valve is fully opened the stem seats against the bushing so that it seals against any leakage of either gas or liquid through the packing. The packing may be replaced when valve is fully opened without interruption of the unit.

Can also be furnished with flared and iron pipe thread connections reversed. Cat. No. 104-C. Add 20% to corresponding list price of No. 92-C sizes. **No. 92-C**



Outside Diam. of Tube	Iron Pipe Thread	List Price Each	Outside Diam. of Tube	Iron Pipe Thread	List Price Each
1/4"	1/4"	\$3.50	3/8"	3/8"	\$3.50
1/4"	3/8"	3.50	1/2"	3/8"	4.10
1/2"	1/4"	3.50	5/8"	1/2"	5.50
3/8"	1/4"	3.50			



TWO-WAY LINE BACKSEATING SHUT-OFF VALVE

Designed especially for multiple installations. A bushing soldered to the inside forms metal to metal seat—a positive seal against leakage. Packing can be replaced when valve is fully opened without losing any refrigerant. Heavy gauge steel base plate, cadmium plated. Base Plate—Base Dimension, 2 1/4"x2 1/4". Bolt Hole Centers, 1 1/2".

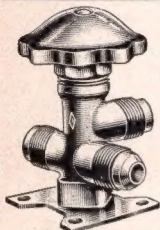
No. 93-C

Outside Diam. of Tube	List Price Each	Outside Diam. of Tube	List Price Each
1/4"	\$4.80	1/2"	\$4.80
1/2"	4.80	5/8"	6.10
3/8"	4.80		

Female Thread

3/8" Female Iron Pipe Thread\$4.80

For any other sizes add 20% to list price of largest corresponding size.



THREE WAY BACK SEATING SHUT-OFF VALVE

Often called a riser valve; very popular for multiple installations. Special sizes to order. The last size given is size of branch outlet.

The valve stem opens and closes branch outlet. Heavy gauge steel base plate, cadmium plated. Base Plate—Base Dimension 2 1/4"x2 1/4". Bolt Hole Centers, 1 1/2".

No. 107-C

Outside Diameter of Tube	List Price Each	Outside Diameter of Tube	List Price Each
1/4"x1/4"x1/4"	\$5.20	1/2"x1/2"x1/4"	5.20
1/2"x1/2"x1/2"	5.20	1/2"x1/2"x1/2"	5.20
3/8"x3/8"x3/8"	5.20	5/8"x5/8"x5/8"	6.70

Female Thread

3/8" Female Iron Pipe Thread\$5.20

For any other sizes add 20% to list price of largest corresponding size.

EXTRA SYLPHONS FOR "SYLPK" VALVES

No. 31326 replaces sylphon on old style "Sylpak" Valves for 1/4", 1/2" and 3/8" O.D. tube size. Height 1 1/8", diam. of flange 1 1/8", diam. of sylphon 1/8". List Price Each\$0.95

No. 31336 replaces sylphon on old style "Sylpak" Valves for 1/2" and 5/8" O. D. tube size and all sizes of new style "Sylpak" Valves.

List Price Each\$1.25



BRASS VALVE HANDLE

For operating shut-off valves. One of the types required by Refrigeration Codes in many cities. 2 3/8 inches in diameter. Weight 20 lbs. Per 100.

No. 296-C—Brass Valve Handle. Each\$0.65

BAKELITE VALVE HANDLE

Similar to No. 296-C, excepting it is made of black bakelite. For use on valves on ice cream cabinets where a handle of this color and appearance is desired.

No. 297-C—Black Bakelite Valve Handle. List Each....\$1.10



\$ New item.

IMPERIAL FLANGE ADAPTERS

No. 197-C Female I.P.T.

I.P.T.	Bolt Ctrs.	List Price Per 100	I.P.T.	Bolt Ctrs.	List Price Per 100
1/4"	1 3/8"	\$150.00	1/4"	1 3/4"	150.00
1/4"	1 1/2"	150.00	3/8"	1 3/4"	170.00
1/4"	1 5/8"	150.00	3/8"	1 3/4"	170.00

No. 198-C Male I.P.T.

I.P.T.	Bolt Ctrs.	List Price Per 100	I.P.T.	Bolt Ctrs.	List Price Per 100
1/4"	1 3/8"	\$150.00	3/8"	1 3/8"	\$150.00
1/4"	1 1/2"	150.00	3/8"	1 1/2"	150.00
1/4"	1 5/8"	150.00	3/8"	1 5/8"	150.00
1/4"	2"	150.00	3/8"	1 3/4"	150.00



No. 199-C S.A.E. Flare

O.D. of Tube	Bolt Ctrs.	List Price Per 100	O.D. of Tube	Bolt Ctrs.	List Price Per 100
1/4"	1 3/8"	\$150.00	3/8"	1 5/8"	150.00
1/4"	1 1/2"	150.00	3/8"	1 3/4"	150.00
1/4"	1 5/8"	150.00	3/8"	1 3/4"	170.00
1/4"	1 3/4"	150.00	3/8"	1 3/4"	170.00
3/8"	1 1/2"	150.00	3/8"	1 3/4"	170.00

FLANGE ADAPTER GASKETS

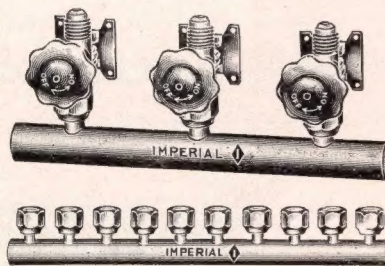
Bolt Hole Centers	List Price
1 3/8"	\$5.00-C
1 1/2"	5.00-C
1 5/8"	5.00-C
1 3/4" or 1 5/8"	9.00-C
2 3/4"	9.00-C



No. 196-C

IMPERIAL COPPER TUBE MANIFOLDS

This new Imperial Manifold provides an economical, quick and convenient method of installation. Made from Type K Copper Pipe, and designed for use with two way line valves. The large size does not cause any restriction to the flow of gas.



Furnished either with flare connections having a forged brass flare nut or with solder connections. In either type, the connections are silver soldered into the pipe on 4" centers. In making an assembly two way line valves are connected to the manifold, and the complete assembly is mounted by means of the mounting brackets on the valves.

For convenience and simplicity in stocking it is suggested that these manifolds be carried in 4' lengths with 12 openings. Manifolds with less than 12 openings can easily be cut with an Imperial Tube Cutter.

MANIFOLDS WITH 12 OPENINGS

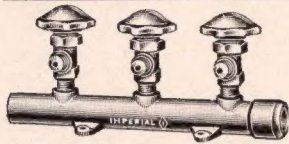
No.	188-F-12	1/4" O.D. SAE Flare	List Price Each	\$11.20
No.	188-S-12	1/4" O.D. Solder	List Price Each	11.20
No.	188-F-12	3/8" O.D. SAE Flare	List Price Each	12.35
No.	188-S-12	3/8" O.D. Solder	List Price Each	12.35
No.	188-F-12	1/2" O.D. SAE Flare	List Price Each	12.50
No.	188-S-12	1/2" O.D. Solder	List Price Each	12.50
No.	188-F-12	5/8" O.D. SAE Flare	List Price Each	24.50
No.	188-S-12	5/8" O.D. Solder	List Price Each	24.50

Manifold adapters are listed on page 4. Below are listed manifolds with less than 12 valve openings.

Outside Diam. of Copper Tube Manif'd	Size and Type of Connection for Valve	2 Valve	3 Valve	4 Valve	5 Valve	6 Valve
7/8"	1/4" O.D. Flare	\$2.00	\$2.90	\$3.80	\$4.70	\$5.60
7/8"	1/4" O.D. Solder					
1 1/8"	3/8" O.D. Flare	2.35	3.35	4.35	5.35	6.35
1 1/8"	3/8" O.D. Solder					
1 1/8"	1/2" O.D. Flare	2.50	3.50	4.50	5.50	6.50
1 1/8"	1/2" O.D. Solder					
1 5/8"	5/8" O.D. Flare	4.50	6.50	8.50	10.50	12.50
1 5/8"	5/8" O.D. Solder					

IMPERIAL FORGED BRASS MANIFOLDS

Imperial Manifold Bars are made of forged brass with mounting brackets integral with body. This feature assures strength and rigidity in assembly. They are furnished with angle valves having either flare or solder connections at the outlet. Two types of manifolds are available. With either type two or more manifolds can be quickly joined together.



MANIFOLDS WITH MALE AND FEMALE SOLDER CONNECTIONS

This type of manifold is supplied with male solder connection on one end and female solder connection on the other end. When assembled with valves having 1/4", 3/8", or 1/2" O.D. tubing connection at outlet, manifolds have openings on the ends for 1 1/8" O.D. solder connections, and valve ports are drilled on 3 1/4" centers. When assembled with valves having 5/8" or 3/4" O.D. tubing connection at outlet, manifolds have openings on the ends for 1 5/8" O.D. solder connections, and valve ports are drilled on 4 1/4" centers.

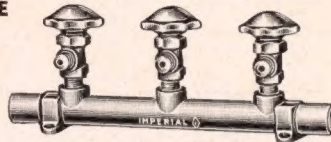
Imperial Manifold Adapters are for use with these manifolds.

§ MANIFOLDS WITH FEMALE I.P.T.

This manifold is tapped with 1/2" female iron pipe thread on each end, and machined on both ends for 1 1/8" O.D. tubing connection.

Available with valves having 1/4", 3/8", 1/2", 5/8" or 3/4" O.D. tubing connections at outlet of valve. Valve ports are drilled on 3 3/4" centers.

Adapters with 1/2" male I.P.T., 1 1/8" O.D. Imperial Manifold Adapters or Solder Fittings can be used with these manifolds.



MANIFOLDS ASSEMBLED WITH NO. 192-C or 192-CS SYLPAK ANGLE VALVES

Tube Size Outlet of Valve	Number of Valves	With Male and Female Solder Connections		§ With 1/2" Fem. Iron Pipe Thread Connections		List Price Each
		Catalog No. Outlet of Valve for S.A.E. Fitting	Catalog No. Outlet of Valve for Solder Joint	Catalog No. Outlet of Valve for S.A.E. Fitting	Catalog No. Outlet of Valve for Solder Joint	
1/4"	2	24-MF	24-MS	124-MF	124-MS	\$12.80
1/4"	3	34-MF	34-MS	134-MF	134-MS	19.00
1/4"	4	44-MF	44-MS	144-MF	144-MS	25.20
1/4"	5	54-MF	54-MS	154-MF	154-MS	31.40
1/4"	6	64-MF	64-MS	164-MF	164-MS	37.60
1/4"	7	74-MF	74-MS	174-MF	174-MS	43.80
1/4"	8	84-MF	84-MS	184-MF	184-MS	50.00
1/4"	9	94-MF	94-MS	194-MF	194-MS	56.20
1/4"	10	104-MF	104-MS	1104-MF	1104-MS	62.40
3/8"	2	26-MF	26-MS	126-MF	126-MS	12.80
3/8"	3	36-MF	36-MS	136-MF	136-MS	19.00
3/8"	4	46-MF	46-MS	146-MF	146-MS	25.20
3/8"	5	56-MF	56-MS	156-MF	156-MS	31.40
3/8"	6	66-MF	66-MS	166-MF	166-MS	37.60
3/8"	7	76-MF	76-MS	176-MF	176-MS	43.80
3/8"	8	86-MF	86-MS	186-MF	186-MS	50.00
3/8"	9	96-MF	96-MS	196-MF	196-MS	56.20
3/8"	10	106-MF	106-MS	1106-MF	1106-MS	62.40
1/2"	2	28-MF	28-MS	128-MF	128-MS	12.80
1/2"	3	38-MF	38-MS	138-MF	138-MS	19.00
1/2"	4	48-MF	48-MS	148-MF	148-MS	25.20
1/2"	5	58-MF	58-MS	158-MF	158-MS	31.40
1/2"	6	68-MF	68-MS	168-MF	168-MS	37.60
1/2"	7	78-MF	78-MS	178-MF	178-MS	43.80
1/2"	8	88-MF	88-MS	188-MF	188-MS	50.00
1/2"	9	98-MF	98-MS	198-MF	198-MS	56.20
1/2"	10	108-MF	108-MS	1108-MF	1108-MS	62.40
5/8"	2	210-MF	210-MS	1210-MF	1210-MS	17.90
5/8"	3	310-MF	310-MS	1310-MF	1310-MS	26.65
5/8"	4	410-MF	410-MS	1410-MF	1410-MS	35.40
5/8"	5	510-MF	510-MS	1510-MF	1510-MS	44.15
5/8"	6	610-MF	610-MS	1610-MF	1610-MS	52.90
3/4"	2	212-MF	212-MS	1212-MF	1212-MS	25.90
3/4"	3	312-MF	312-MS	1312-MF	1312-MS	38.65
3/4"	4	412-MF	412-MS	1412-MF	1412-MS	51.40
3/4"	5	512-MF	512-MS	1512-MF	1512-MS	64.15
3/4"	6	612-MF	612-MS	1612-MF	1612-MS	76.90

§ New item.

MANIFOLDS ASSEMBLED WITH NO. 62-C VALVE WITH WRENCH WING SEAL CAPS

Tube Size of Valve	Number of Valves	With Male and Female Solder Connections	§ With 1/2" Fem. Iron Pipe Thread Connections	List Price Each
		Catalog No. Outlet of Valve for S.A.E. Fitting	Catalog No. Outlet of Valve for S.A.E. Fitting	
1/4"	2	24-MPF	124-MPF	\$10.90
1/4"	3	34-MPF	134-MPF	16.15
1/4"	4	44-MPF	144-MPF	21.40
1/4"	5	54-MPF	154-MPF	26.65
1/4"	6	64-MPF	164-MPF	31.90
1/4"	7	74-MPF	174-MPF	37.15
1/4"	8	84-MPF	184-MPF	42.40
1/4"	9	94-MPF	194-MPF	47.65
1/4"	10	104-MPF	1104-MPF	52.90
3/8"	2	26-MPF	126-MPF	10.90
3/8"	3	36-MPF	136-MPF	16.15
3/8"	4	46-MPF	146-MPF	21.40
3/8"	5	56-MPF	156-MPF	26.65
3/8"	6	66-MPF	166-MPF	31.90
3/8"	7	76-MPF	176-MPF	37.15
3/8"	8	86-MPF	186-MPF	42.40
3/8"	9	96-MPF	196-MPF	47.65
3/8"	10	106-MPF	1106-MPF	52.90
1/2"	2	28-MPF	128-MPF	12.10
1/2"	3	38-MPF	138-MPF	17.95
1/2"	4	48-MPF	148-MPF	23.80
1/2"	5	58-MPF	158-MPF	29.65
1/2"	6	68-MPF	168-MPF	35.50
1/2"	7	78-MPF	178-MPF	41.35
1/2"	8	88-MPF	188-MPF	47.20
1/2"	9	98-MPF	198-MPF	53.05
1/2"	10	108-MPF	1108-MPF	58.90
5/8"	2	210-MPF	1210-MPF	16.90
5/8"	3	310-MPF	1310-MPF	25.15
5/8"	4	410-MPF	1410-MPF	33.40
5/8"	5	510-MPF	1510-MPF	41.65
5/8"	6	610-MPF	1610-MPF	49.90
3/4"	2	212-MPF	1212-MPF	19.50
3/4"	3	312-MPF	1312-MPF	29.95
3/4"	4	412-MPF	1412-MPF	39.80
3/4"	5	512-MPF	1512-MPF	49.65
3/4"	6	612-MPF	1612-MPF	59.50



MANIFOLD BARS ONLY WITH MALE AND FEMALE SOLDER CONNECTIONS

I.P.T. Size of Valve Tapping	No. of Ports	Overall Length	O.D. of Ends	Catalog No.	List Price Each
1/4"	2	6 1/4"	1 1/8"	72-CS	\$4.80
3/8"	2	6 1/4"	1 1/8"	72-CS	4.80
1/2"	2	8 1/4"	1 5/8"	74-CS	5.90
3/4"	2	8 1/4"	1 5/8"	74-CS	5.90
1/4"	3	9 3/8"	1 1/8"	73-CS	7.00
3/8"	3	9 3/8"	1 1/8"	73-CS	7.00
1/2"	3	12 3/8"	1 5/8"	75-CS	8.70
3/4"	3	12 3/8"	1 5/8"	75-CS	8.70

§ MANIFOLD BARS ONLY WITH 1/2" FEMALE I.P.T. ON ENDS

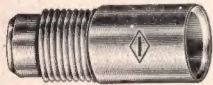


I.P.T. Size of Valve Tapping	No. of Ports	Overall Length	Catalog No.	List Price Each
3/8"	2	8 1/2"	172-CS	\$4.80
1/2"	2	8 1/2"	172-CS	4.80
3/8"	3	12 1/4"	173-CS	7.00
1/2"	3	12 1/4"	173-CS	7.00

MANIFOLD ADAPTERS

For Use on Female End of Forged Brass Manifold Only.

Made on one end to fit female end of the manifold. Other end is for various sizes of flare or solder joints in straight or elbow types.



TO FIT FEMALE END OF MANIFOLD WITH FLARE CONNECTION ON OTHER END

For Manifolds with Valves for 1/4", 3/8" or 1/2" Tubing.

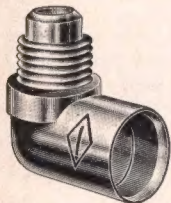
No. 38-SF Flare

	List Each
1/4" S.A.E. Flare	\$.024
3/8" S.A.E. Flare	.24
1/2" S.A.E. Flare	.24
3/8" S.A.E. Flare	.24
1/2" Fem. I.P.T.	.24
3/4" Fem. I.P.T.	.24
1" Fem. I.P.T.	.24

For Manifolds with Valves for 5/8" or 3/4" Tubing.

No. 38-SFL

	List Each
1/2" S.A.E. Flare	\$.040
5/8" S.A.E. Flare	.40
3/4" S.A.E. Flare	.40
1" Fem. I.P.T.	.40
1 1/2" Fem. I.P.T.	.40



For Manifolds with Valves for 1/4", 3/8" or 1/2" Tubing.

No. 55-SF Flare

	List Each
1/4" S.A.E. Flare	\$.072
3/8" S.A.E. Flare	.72
1/2" S.A.E. Flare	.72
5/8" S.A.E. Flare	.72

For Manifolds with Valves for 5/8" or 3/4" Tubing.

No. 55-SFL

	List Each
1/2" S.A.E. Flare	\$.104
3/8" S.A.E. Flare	1.04
3/4" S.A.E. Flare	1.04

TO FIT FEMALE END OF MANIFOLD WITH SOLDER CONNECTION ON OTHER END

For Manifolds with Valves for 1/4", 3/8" or 1/2" Tubing.

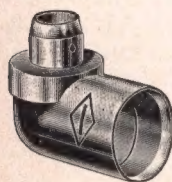
No. 22-S Solder

	List Each
1/4" O.D. Solder	\$.024
3/8" O.D. Solder	.24
1/2" O.D. Solder	.24
5/8" O.D. Solder	.24

For Manifolds with Valves for 5/8" or 3/4" Tubing.

No. 22-SL

	List Each
5/8" O.D. Solder	\$.040
3/4" O.D. Solder	.40
7/8" O.D. Solder	.40
1 1/8" O.D. Solder	.40
1 3/8" O.D. Solder	.40
1 1/2" O.D. Solder	.40



For Manifolds with Valves for 1/4", 3/8" or 1/2" Tubing.

No. 57-S Solder

	List Each
1/4" O.D. Solder	\$.072
3/8" O.D. Solder	.72
1/2" O.D. Solder	.72
5/8" O.D. Solder	.72

For Manifolds with Valves for 5/8" or 3/4" Tubing.

No. 57-SL

	List Each
5/8" O.D. Solder	\$.104
3/4" O.D. Solder	1.04
7/8" O.D. Solder	1.04
1 1/8" O.D. Solder	1.04
1 3/8" O.D. Solder	1.04
1 1/2" O.D. Solder	1.04
1 5/8" O.D. Solder	1.04



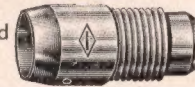
PLUGS TO FIT FEMALE END OF MANIFOLD

No. 639-S

1 1/8"—For small 2 or 3 hole Manifold, List, ea.	\$.016
1 5/8"—For large 2 or 3 hole Manifold, List, ea.	.70

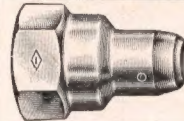
MANIFOLD ADAPTERS

For Use on Copper Tube Manifolds No. 188-F and 188-S and for Male end of Forged Brass Manifolds.



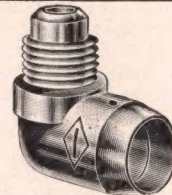
No. 138-S To fit male end of Manifold with flare connection on other end.

O.D. Size of Bar End	O.D. Flare	List Each	O.D. Size of Bar End	O.D. Flare	List Each
7/8"	1/4"	\$0.40	1 1/8"	1/2"	\$0.50
7/8"	3/8"	.40	1 1/8"	5/8"	.50
7/8"	1/2"	.40	1 1/8"	1 1/2"	.60
7/8"	5/8"	.40	1 1/8"	5/8"	.60
1 1/8"	1/4"	.50	1 1/8"	3/4"	.60
1 1/8"	3/8"	.50			



No. 46-S To fit male end of Manifold with female I.P.T. Connection on other end.

O.D. Size of Bar End	Fm. I.P.T.	List Each	O.D. Size of Bar End	Fm. I.P.T.	List Each
7/8"	1/4"	\$0.40	1 1/8"	3/4"	\$0.60
7/8"	3/8"	.40	1 1/8"	5/8"	.85
1 1/8"	3/8"	.60	1 1/8"	1"	.85
1 1/8"	1/2"	.60	1 1/8"	1 1/2"	1.20



No. 149-S To fit male end of Manifold with flare connection on other end.

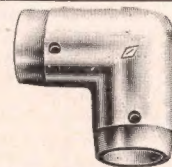
O.D. Size of Bar End	O.D. Flare	List Each	O.D. Size of Bar End	O.D. Flare	List Each
7/8"	1/4"	\$0.40	1 1/8"	1/2"	\$0.60
7/8"	3/8"	.40	1 1/8"	5/8"	.60
7/8"	1/2"	.40	1 1/8"	1 1/2"	1.00
7/8"	5/8"	.40	1 1/8"	5/8"	1.00
1 1/8"	1/4"	.60	1 1/8"	3/4"	1.00
1 1/8"	3/8"	.60			



No. 42-S To fit male end of Manifold with solder connection on other end.

O.D. Size of Bar End	O.D. Solder	List Each	O.D. Size of Bar End	O.D. Solder	List Each
7/8"	1/4"	\$0.20	1 1/8"	5/8"	\$0.45
7/8"	3/8"	.20	1 1/8"	3/4"	.45
7/8"	1/2"	.20	1 1/8"	7/8"	.45
7/8"	5/8"	.12	1 1/8"	1 1/8"	.45
1 1/8"	1/4"	.25	1 1/8"	1 3/8"	.25
1 1/8"	3/8"	.25	1 1/8"	1 1/2"	.32
1 1/8"	1/2"	.25	1 1/8"	1 5/8"	.25
1 1/8"	5/8"	.25			

No. 55-S To fit male end of Manifold with solder connection on other end.



O.D. Size of Bar End	O.D. Solder	List Each	O.D. Size of Bar End	O.D. Solder	List Each
7/8"	1/4"	\$0.40	1 1/8"	5/8"	\$1.00
7/8"	3/8"	.40	1 1/8"	3/4"	1.00
7/8"	1/2"	.40	1 1/8"	7/8"	1.00
7/8"	5/8"	.40	1 1/8"	1 1/8"	1.00
1 1/8"	1/4"	.60	1 1/8"	1 3/8"	1.00
1 1/8"	3/8"	.60	1 1/8"	1 1/2"	1.00
1 1/8"	1/2"	.60	1 1/8"	1 5/8"	.93
1 1/8"	5/8"	.60			

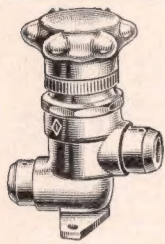
No. 640-S Cap for Male End of Manifold.



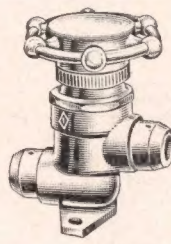
O.D. Size of Bar End	List Each
7/8"	\$.012
1 1/8"	.16
1 5/8"	.70

IMPERIAL BACK SEATING PACKLESS LINE SHUT-OFF VALVES

The body of the valves are forged brass, valve stems have a tensile strength of approximately 55,000 pounds per square inch. Has drawn brass, back seat; special sylphon, cadmium plated steel operating spring, cast bronze operating cap and a rubber moisture seal.

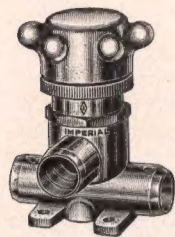


**No. 193-CS
TWO-WAY VALVE
With Solder Connections**

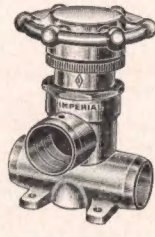


O.D. of Tube	List Price Each
3/4"	\$13.50
7/8"	28.00
1"	38.00
1 1/8"	38.00

O.D. of Tube	List Price Each
1 1/4"	\$66.00
1 3/8"	66.00
1 1/2"	72.00
1 5/8"	72.00

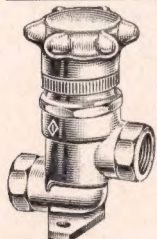


**THREE-WAY VALVE
No. 207-CS
With Solder Connections**

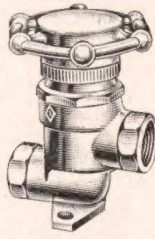


O.D. of Tube	List Price Each
3/4"	\$15.70
7/8"	32.80
1"	40.00
1 1/8"	40.00

O.D. of Tube	List Price Each
1 1/4"	\$70.00
1 3/8"	70.00
1 1/2"	76.00
1 5/8"	76.00



**No. 193-C
TWO-WAY and
THREE-WAY
VALVES**

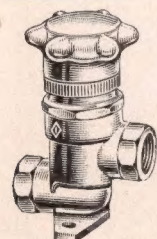


Female Iron Pipe Thread	List Price Each
1/2"	\$10.70
3/4"	26.00
1"	36.00

No. 207-C	List Price Each
1/2"	\$11.50
3/4"	28.00
1"	38.00

Female Iron Pipe Thread	List Price Each
1 1/4"	\$66.00
1 1/2"	72.00

No. 207-C	List Price Each
1 1/4"	70.00
1 1/2"	76.00



QUICK OPENING PACKLESS CHARGING BOARD VALVE (Back-Seating)

Recommended for installation on charging boards or other locations where it is necessary to operate valve frequently. May be fully opened or closed by 5/8 turn of wheel handle. Has replaceable lead alloy seat.

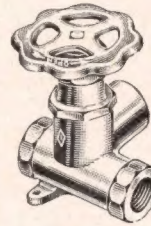
No. 393-C Two-Way	List Price Each
1/4" Flare	\$7.25
3/8" Flare	7.25
3/8" Fem. I.P.T.	7.25

No. 307-C Three-Way	List Price Each
1/2" Flare	\$7.60
3/8" Flare	7.60
3/8" Fem. I.P.T.	7.60

DOUBLE PACKED LINE SHUT-OFF VALVE

The valve has a brass forged body, with a valve stem having a tensile strength of approximately 55,000 pounds per square inch.

Has cast bronze hand wheel, drawn brass glands and washers, and special valve packing. Furnished for female iron pipe in two-way and three-way types.



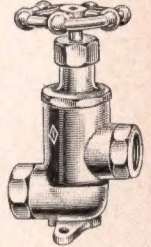
No. 93-C TWO-WAY	List Price Each
Female Iron Pipe Thread	
1/2"	\$10.00
3/4"	12.80
1"	14.00

No. 107-C THREE-WAY	List Price Each
Female Iron Pipe Thread	
1/2"	\$10.80
3/4"	15.00
1"	17.00

DOUBLE PACKED LARGE CAPACITY TWO-WAY LINE SHUT-OFF VALVE

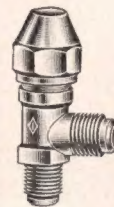
This large capacity line shut-off valve is double packed and furnished for 1 1/2-inch female iron pipe thread.

Has forged brass body, valve stem which has a tensile strength of 55,000 pounds per square inch, cast bronze hand wheel, drawn brass glands and washer, and special packing.



Female Iron Pipe Thread	List Price Each
No. 93-C 1 1/2"	\$36.00

§ IMPERIAL THROTTLING VALVE



This valve meets Navy specifications for a hand expansion valve to be connected in parallel with an automatic expansion valve, in such a way that the hand expansion can be used temporarily when making repairs on the automatic valve.

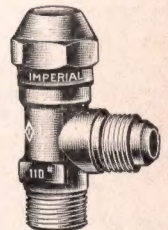
Can be used in a gauge line or similar line where throttling is desired. Used in this way, the Imperial Throttling Valve protects gauges and other sensitive instruments from damage due to pressure pulsations.

Valve has a needle stem seating against an .078" orifice. This design permits a very fine adjustment.

No. 262-C Imperial Throttling Valve 1/2" Flare x 3/8" Flare. List price each\$4.50

IMPERIAL RELIEF VALVES For Sulphur Dioxide, Methyl and Freon

This Relief Valve is built to conform with the Refrigeration Code in many cities. Valve is installed in high side and outlet connection leads to atmosphere or low side. Should the pressure in the system be excessive at any time the valve will open at its set relief pressure.

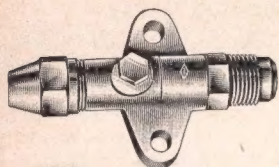


Body is a brass forging with special composition seat and all other parts are brass or bronze.

Furnished for the following relief Pressures: 90—110—135—150—180—195—210. Specify Catalog Number, Size and Relief Pressure.

No. 280-C

Bottom or Inlet	Side or Outlet	List Price Each
1/4" Male IPT	1/4" OD SAE Flare	\$6.50
1/4" Male IPT	3/8" OD SAE Flare	6.50
3/8" Male IPT	3/8" Female IPT	6.50
3/8" Male IPT	3/8" OD SAE Flare	6.50
3/8" Male IPT	1/2" OD SAE Flare	6.50
1/2" Male IPT	3/8" Female IPT	8.00
1/2" Male IPT	5/8" OD SAE Flare	8.00
1/2" Male IPT	1/2" OD SAE Flare	8.00
1/2" Male IPT	3/8" OD SAE Flare	8.00



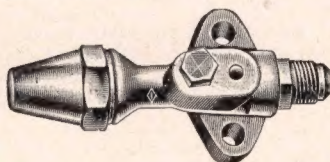
COMPRESSOR VALVES WITH BACK SEATING NEEDLE SHUT-OFF

A Compressor Valve for domestic units. Constructed for long wear. Complete with Hex Brass Seal Cap and standard pipe plug. No. 41-C Wrench Wing Seal Cap can be substituted if desired. Add \$0.81 to the list price. Has 1/8" I.P.T. gauge tapping. Prices shown, are for flat base. Prices for raised base on application.

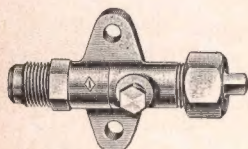
Catalog No.	1/4"	3/8"	1/2"	Bolt Hole Centers
43-C	\$4.00	\$4.00	\$4.00	1 3/8"
44-C	4.00	4.00	4.00	1 1/2"
45-C	4.00	4.00	4.00	1 5/8"
46-C	4.25	4.25	4.25	1 3/4"

HEAVY DUTY COMPRESSOR VALVE WITH BACK SEATING NEEDLE SHUT-OFF

Heavy-duty valve for large compressors. Regularly furnished with 1/8" I.P.T. gauge tapping, but can also be furnished with 1/4" I.P.T. gauge tapping. Can also be tapped between seats.



Outside Diam. of Tube	Bolt Hole Centers	List Price Ea. No. 257-C Flat Base	List Price Ea. No. 57-C Raised Base
1/4"	1 5/8"	\$5.50	\$5.70
3/8"	1 5/8"	5.50	5.70
1/2"	1 5/8"	5.50	5.70
5/8"	1 5/8"	5.80	6.00



COMPRESSOR VALVE WITH BACK SEATING NEEDLE SHUT- OFF EXPOSED STEM TYPE

Has substantial size body, and constructed for long wear and lasting satisfaction. 1/8" Female I.P.T. gauge tapping.

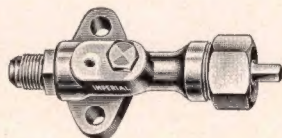
Prices shown are for flat base. Prices for raised base on application.

Catalog No.	1/4"	3/8"	1/2"	Bolt Hole Centers
343-C	\$4.00	\$4.00	\$4.00	1 3/8"
344-C	4.00	4.00	4.00	1 1/2"
345-C	4.00	4.00	4.00	1 5/8"
346-C	4.25	4.25	4.25	1 3/4"

COMPRESSOR VALVE WITH BACK SEATING NEEDLE SHUT-OFF EXPOSED STEM TYPE

This is a heavy duty valve for large compressors. Has a heavy flange 5/8" in thickness. Is of the exposed stem type with bolt hole center of 1 5/8 inches. Has 1/8" iron pipe threaded gauge tapping. Furnished with flat base or double step extruded raised base.

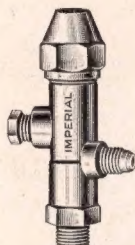
Outside Diameter of Tube	List Price Each No. 357-CF Flat Base	List Price Each No. 357-CR Raised Base
1/4"	\$5.50	\$5.70
3/8"	5.50	5.70
1/2"	5.50	5.70
5/8"	5.80	6.00



BACK SEATING SHUT-OFF VALVE FOR LIQUID RECEIVERS AND COMPRESSORS

These valves are the same excepting the flared and iron pipe connections are reversed. Plug connection at side of valve is for drawing vacuum, dehydrating and charging.

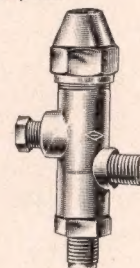
Furnished complete with Hex Brass Seal Cap. No. 41-C Wrench Wing Seal Cap can be substituted if desired. Add \$0.81 to the list price.



No. 91-C

NO. 91-C

O. D. of Tube	Iron Pipe Thread	List Price Each
1/4"	1/4"	\$4.00
3/8"	1/4"	4.00
1/2"	1/4"	4.00



No. 94-C

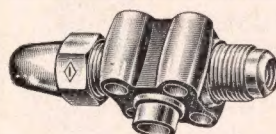
NO. 94-C

O. D. of Tube	Iron Pipe Thread	List Price Each
1/4"	1/4"	\$4.00
3/8"	1/4"	4.00
1/2"	1/4"	4.00

SMALL SERVICE DRUM VALVE

For use on small service tanks carrying any liquid refrigerant except ammonia. Exposed stem is made of monel metal. Screened inlet. Body is heavy brass forging. Valve furnished without fusible metal safety plug unless otherwise specified. 1/8" female I.P.T. outlet and 3/8" male I.P.T. tank connection.

No. 227-C Small Service Drum Valve, Each\$3.30
No. 227-C Small Service Drum Valve with Fusible Metal Plug, Each 3.60



EVAPORATOR SUCTION VALVE

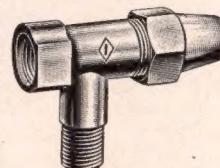
Has ammonia type gasket joint. Mounting drill holes are 3/8" in diameter on 7/8" centers. Liberal packing gland for easy adjustment. Stem is cadmium plated steel, and body is forged brass. Complete with hex brass seal cap.

No. 220-C Evaporator Suction Valve for 1/4", 3/8" or 1/2" O.D. S.A.E. Tube Connection. List Each\$3.50
Specify size when ordering.

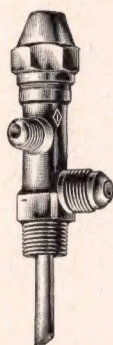
No. 218-C EVAPORATOR LIQUID VALVE

This valve has an inlet with 3/8"-18 female thread and is particularly adapted to fit Imperial No. 176-C and No. 177-C Evaporator Line Strainers. The outlet is 1/4" male iron pipe thread. Body is forged brass and stem cadmium plated steel. Furnished complete with hex brass seal cap.

No. 218-C—Evaporator Liquid Valve. List Price, Each\$2.70



COMBINATION LIQUID RECEIVER TANK VALVE WITH CONDENSER LINE CONNECTION



Designed especially for Liquid Receiver Tanks. Eliminates necessity for an opening in other end of tank, and does away with flange and elbow. Furnished complete with Hex. Brass Seal Cap. No. 41-C Wrench Wing Seal Cap can be substituted. Add \$0.81 to list price. When ordering specify length of tube, (Measured from end of thread.) Unless specified 2-7/8" length will be furnished.

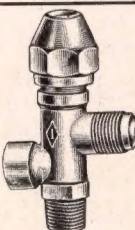
No. 47-C

Outside Diameter of Tube Inlet	Outlet	Iron Pipe Thr'd	List Price Each
1/4"	1/4"	3/8"	\$4.00
3/8"	1/4"	3/8"	4.00

RECEIVER TANK VALVE WITH RELIEF OUTLET

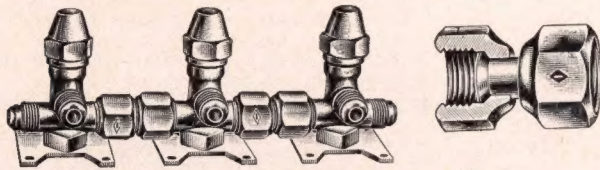
For use with our No. 280-C Relief Valve, shown on page 5. No. 621-F Fusible Plug and No. 248-F Fusible Half Union, page 14, may also be used with this valve.

No. 208-C Receiver Tank Valve with Relief Outlet, 3/8" flare x 1/4" Male I.P.T. x 1/4" Fem. I.P.T. Relief Connection, List Price Each\$3.80



MANIFOLD UNION COUPLING

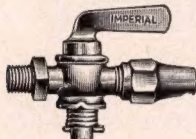
No. 670-F Manifold Union Coupling can be used to couple three-way line valves together and eliminate the use of manifold bars. It is possible to couple any number of valves in a row. One or more units in the system may be shut off without interfering with the remaining units.



No. 670-F Manifold Union Coupling

	List Each		List Each
1/4" O.D. S.A.E. ...	\$0.86	1/2" O.D. S.A.E. ...	1.09
5/8" O.D. S.A.E. ...	.92	3/8" O.D. S.A.E. ...	1.45
3/8" O.D. S.A.E. ...	.98		

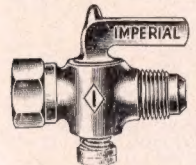
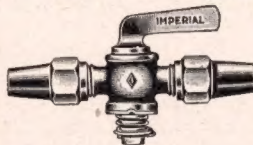
SHUT-OFF VALVES FOR ELECTROLUX INSTALLATIONS



This valve is furnished for 3/8" O.D. copper tubing on one end and 1/4" male iron pipe thread on the other, complete with nut. No. 157-S.A.E.—Shut-Off Valve, List Each\$1.50

This valve has connections for 3/8" O.D. copper tubing on both ends. Furnished complete with nuts.

No. 158-S.A.E. — Shut-Off Valve, List Each\$1.60



An ideal valve for use between strainer and gas line connection. 3/8" O.D. Female S.A.E. Thread on one end, which fits on the strainer and 3/8" Male S.A.E. Thread on other end. Furnished with gasket.

No. 159-S.A.E. — Shut-Off Valve, List Each\$1.50

WRENCH WING SEAL CAP

Used as a combination seal cap and wrench for stem of valve. This cap is one of the types required by Refrigeration Codes in many cities.

No. 41-C—Wrench Wing Seal Cap for 1/4", 5/8" and 3/8" Valves. Each\$1.05

No. 105-C—Wrench Wing Seal Cap is for 1/2" and 5/8" Valves. Each 2.00



IMPERIAL G-W CONTROL AND CHECK VALVE

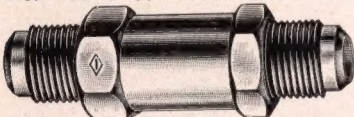
Prevents the flow of gases in the suction line from one coil to the other or to any individual coil from the common suction line. This eliminates condensation of warm gas in colder coil, stops frosting of suction lines, and provides better regulation of entire system. In addition, it shortens the running time of compressor, and gives positive temperature control when used with various types of pressure or temperature regulating valves usually installed in refrigerating systems.

No. 180-C 1/4" O.D. S.A.E. List Price, Each\$5.00
Overall length approx. 3 1/4".

No. 180-C 1/2" O.D. S.A.E. List Price, Each 5.00
Overall length approx. 3 1/2".

No. 180-C 5/8" O.D. S.A.E. List Price, Each 6.20
Overall length approx. 4".

No. 180-C 3/4" O.D. S.A.E. List Price, Each ..\$14.00
Overall length approx. 4 1/4".

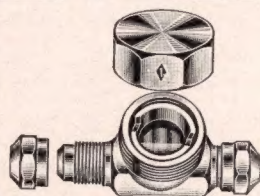


IMPERIAL LIQUID INDICATOR

Has heavy glass in port hole, sealed against leakage with Neoprene gasket. The seal cap is an added precaution against leaks. Furnished with cap nuts.

No. 187-C 1/4" Flare x 1/4" Flare. List Price, Each\$3.00

No. 187-C 3/8" Flare x 3/8" Flare. List Price, Each.... 3.00



§ IMPERIAL LIQUID INDICATOR

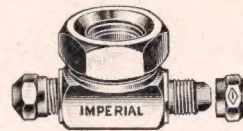
This Liquid indicator is for use on the liquid line and makes it possible to see the liquid as it passes through the line.

The presence of bubbles in the liquid indicates shortage of liquid refrigerant.

Furnished complete with flare tube cap nut on each end.

No.194-C

List Price

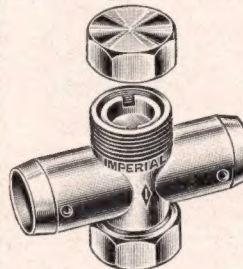


1/4" Fem. I.P.T. x 1/4" Fem. I.P.T.	List Price, each...	\$1.85
1/4" O.D. Flare.	List Price, Each	2.00
1/4" Fem. Flare x 1/4" Male Flare.	List Price, Each...	2.00
1/4" Male Flare x 1/4" Male I.P.T.	List Price, Each...	2.00
1/4" Male Flare x 3/8" Male I.P.T.	List Price, Each	2.00
3/8" O.D. Flare.	List Price, Each	2.00
3/8" Male Flare x 3/8" Male I.P.T.	List Price, Each...	2.00

DOUBLE PORT LIQUID INDICATOR

With Seal Caps

Used on the liquid line. This double port liquid indicator is especially convenient, as when lighting is poor a light may be placed behind one port. Furnished with heavy sight glass, sealed with Neoprene gasket. Seal caps on both ports as added precaution against leaks.



No. 186-C 1/2" O.D. S.A.E. (Flared). List Price, Ea....\$3.60

5/8" O.D. S.A.E. (Flared). List Price, Ea. 3.60

1/2" O.D. Solder. List Price, Ea.. 3.60

5/8" O.D. Solder. List Price, Ea.. 3.60

3/4" O.D. Solder. List Price, Ea.. 3.60

7/8" O.D. Solder. List Price, Ea.. 5.00

1" O.D. Solder. List Price, Ea.. 5.00

1 1/8" O.D. Solder. List Price, Ea.. 5.00

1/2" Female I.P.T. List Price, Ea.. 3.60

3/4" Female I.P.T. List Price, Ea.. 5.00

REFRIGERANT DRIERS

ACTIVATED ALUMINA

This is a very efficient dehydrating agent. Will not react with refrigerants or decompose. Can be reactivated without losing its high efficiency. 4 to 8 mesh. Furnished in sealed cans.

No. 236-C	1 lb. can	Per Can \$0.59
No. 237-C	5 lb. can	Per Can 2.80
No. 238-C	25 lb. can	Per Can 12.50

DRIERITE

This is an anhydrous calcium sulphate which is an excellent drier to put in dehydrators. Does not expand, contract or disintegrate. 4 to 6 mesh. Furnished in sealed cans.

No. 250-C	1 lb. can	Per Can \$0.54
No. 251-C	5 lb. can	Per Can 2.60

ANHYDROUS CALCIUM CHLORIDE

This is a high grade drying agent for drying out the entire system. 4 to 8 mesh. Furnished in sealed cans.

No. 252-C	1 lb. can	Per Can \$0.35
No. 253-C	5 lb. can	Per Can 1.60

ANHYDROUS CALCIUM OXIDE

This is pure dry Calcium Oxide for use in dehydrators. 4 to 8 mesh. Furnished in sealed cans.

No. 254-C	1 lb. can	Per Can \$0.35
No. 255-C	5 lb. can	Per Can 1.60

You will find that

IMPERIAL TOOLS simplify

installation and service work.



SEALED END DEHYDRATORS

These dehydrators are made from 2" O.D. copper tube with brass forged ends. Have felt and screen at each end to prevent any foreign matter from entering or leaving the dehydrator. They are furnished filled with Activated Alumina, or Drierite. Specify drier desired.* Note that this dehydrator may not be supplied empty. Unless drier is specified, Activated Alumina will be furnished. Furnished with 2½", 6", 12" or 18" shells with flared tube cap nuts on each end.

MODEL NUMBERS, SPECIFICATIONS and LIST PRICE EACH

SIZE and TYPE CONNECTION	No. 402½-C (2½" Shell) Overall length: 5½ in. Capacity: 5.8 cu. in. Net wt. approx. ¾ lb.	No. 406-C (6" Shell) Over- all length: 9 in. Capacity: 16 cu. in. Net wt.: Approx. 1½ lbs.
	Filled	Empty
¼" S.A.E. Flare	\$3.90	\$4.85
⅜" S.A.E. Flare	3.95	4.90
⅜" Female I.P.T.		4.95
½" S.A.E. Flare	4.00	4.95

MODEL NUMBERS, SPECIFICATIONS and LIST PRICE EACH

SIZE and TYPE CONNECTION	No. 412-C (12" Shell): Overall length: 15 in. Capacity: 33.4 cu. in. Net wt.: Approx. 2¾ lbs.	No. 418-C (18" Shell): Overall length: 21 in. Capacity: 50.8 cu. in. Net wt.: Approx. 4 lbs.
	Filled	Empty
¼" S.A.E. Flare	\$6.55	\$12.00
⅜" S.A.E. Flare	6.60	12.00
⅜" Female I.P.T.	6.65	12.50
½" S.A.E. Flare	6.65	12.50

IMPERIAL REFILLABLE DEHYDRATORS

Drier is contained in refill cartridge which can be readily removed and a new one substituted. Dispersion tube is an integral part of cartridge, increasing drying efficiency and minimizing pressure drop. Refill cartridge seals on the inside of its dispersion tube providing positive assurance against by-passing around cartridge. Refill cartridge is furnished in moisture-proof tin container in different lengths, for dehydrators of various shell lengths. Choice of four driers at same price. Specify size and type of drier.* Unless drier is specified Activated Alumina will be furnished. Shell is 2" O.D. and furnished in 5½", 12" and 18" lengths.



No. 510-C

SIZE and TYPE CONNECTION	5½" Shell. Overall Length: 7¾"; Capacity: 11.5 cu. in.	
	Filled	Empty
¼" S.A.E. Flare	\$ 8.00	\$ 5.50
⅜" S.A.E. Flare	8.35	5.85
⅜" Female I.P.T.	9.25	6.75
½" Flare	9.25	6.75

No. 511-C Refill Cartridge filled with drier. Specify drier desired.* List Price. Each \$2.50

No. 512-C

SIZE and TYPE CONNECTION	12" Shell. Overall Length: 14½"; Capacity: 27 cu. in.	
	Filled	Empty
¼" S.A.E. Flare	\$11.75	\$ 7.00
⅜" S.A.E. Flare	12.10	7.35
⅜" Female I.P.T.	13.00	8.25
½" S.A.E. Flare	13.00	8.25

No. 513-C Refill Cartridge filled with drier. Specify drier desired.* List Price. Each \$4.75

No. 514-C

SIZE and TYPE CONNECTION	18" Shell. Overall Length: 20¾"; Capacity: 41.5 cu. in.	
	Filled	Empty
¾" S.A.E. Flare	\$15.75	\$ 9.00
½" S.A.E. Flare	16.25	9.50
⅜" Female I.P.T.	16.25	9.50
½" Female I.P.T.	17.25	10.50

No. 515-C Refill Cartridge filled with drier. Specify drier desired.* List Price, Each \$6.75



IMPERIAL DEHYDRATORS

Good insurance against any moisture freezing in the system or any compressor trouble. Has removable end flange with various lengths of shells. Made of brass with brass forged ends.

Two pieces of ¼" felt and a rigidly supported screen at each end prevent any foreign matter from passing through the line to the compressor. Furnished complete with flare nuts and seal caps. Specify drier desired.*

SIZE and TYPE of CONNECTION	No. 304-C (4" Shell) Overall length: 7¾" Capacity: 8.28 cu. in. Net. wt.: Approx. 2½ lbs.	
	Filled	Empty
¼" S.A.E. Flare	\$ 8.75	\$ 8.25
⅜" S.A.E. Flare	9.25	8.75
½" S.A.E. Flare	9.75	9.25
⅜" Female I.P.T.	9.75	9.25

SIZE and TYPE of CONNECTION	No. 306-C (6" Shell) Overall length: 9¾" Capacity: 12.5 cu. in. Net wt.: Approx. 3 lbs.	
	Filled	Empty
¼" S.A.E. Flare	\$ 9.50	\$ 9.00
⅜" S.A.E. Flare	10.00	9.50
½" S.A.E. Flare	10.50	10.00
⅜" Female I.P.T.	10.50	10.00

SIZE and TYPE of CONNECTION	No. 309-C (9" Shell) Overall length: 12¾" Capacity: 18.3 cu. in. Net wt.: Approx. 3½ lbs.	
	Filled	Empty
¼" S.A.E. Flare	\$11.50	\$10.00
⅜" S.A.E. Flare	12.00	10.50
½" S.A.E. Flare	12.50	11.00
⅜" Female I.P.T.	12.50	11.00

SIZE and TYPE of CONNECTION	No. 312-C (12½" Shell) Overall length: 16¼" Capacity 25 cu. in. Net wt.: Approx. 4 lbs.	
	Filled	Empty
¼" S.A.E. Flare	\$13.00	\$11.00
⅜" S.A.E. Flare	13.50	11.50
½" S.A.E. Flare	14.00	12.00
⅜" Female I.P.T.	14.00	12.00

DEHYDRATORS—With Disper- sion Tube

(Manufactured under Henry Valve
Co. Patents)



This dehydrator has brass shell and forged steel flange and cover for easy refilling and cleaning. Brass dispersion tube at inlet end assures even distribution of refrigerant. Has felt and screen at outlet end. Furnished complete with copper tube cap nuts. Furnished empty or filled with Activated Alumina, Calcium Chloride, Calcium Oxide or Drierite. Specify drier desired.* Shell lengths are 5½", 12" and 18".

SIZE and TYPE CONNECTION	No. 385-C (5½" Shell) Overall length: 8 in. Capacity: 13.5 cu. in. Net weight: 2 lbs.	
	Filled	Empty
¼" S.A.E. Flare	\$ 9.00	\$ 8.00
⅜" S.A.E. Flare	9.50	8.50
½" S.A.E. Flare	10.00	9.00
⅜" Female I.P.T.	10.00	9.00

SIZE and TYPE CONNECTION	No. 386-C (12" Shell) Overall length: 14½ in. Capacity: 31.5 cu. in. Net weight: 3 lbs.	
	Filled	Empty
¼" S.A.E. Flare	\$12.50	\$10.50
⅜" S.A.E. Flare	13.00	11.00
½" S.A.E. Flare	13.50	11.50
⅜" Female I.P.T.	13.50	11.50

SIZE and TYPE CONNECTION	No. 387-C (18" Shell) Overall length: 20¾ in. Capacity: 47.2 cu. in. Net weight: 4 lbs.	
	Filled	Empty
¾" S.A.E. Flare	\$16.50	\$13.00
½" S.A.E. Flare	17.00	13.50
½" Female I.P.T.	18.00	14.50

* IMPORTANT NOTE: For dehydrator filled with Activated Alumina, specify No. with "A" following, as "No. 304-CA". For Calcium Chloride use "C", as "No. 304-CC". For Calcium Oxide use "O", for Drierite use "D". When desired empty use "E".

\$ New item.

SMALL DEHYDRATOR



This type of dehydrator is usually used for permanent installation on small systems. Is 1" in diameter with 3/8 inch shell and is 5 5/8 inches overall. Is furnished filled with Activated Alumina and cannot readily be recharged. Furnished with flare nuts and copper seal caps for 1/4" O.D. S.A.E. flared connection on each end.

No. 31-C DEHYDRATOR..... List Price Each \$2.95

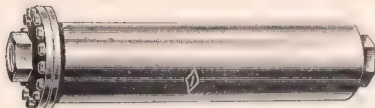


NO. 55-C DEHYDRATOR

This is a small size dehydrator. It is made of brass, filled with activated alumina and furnished with 1/4" flare nuts complete with seal caps at each end.

Overall sizes are 6 1/8" long and 1 1/8" diameter. Net Wt. approx. 1 lb.

No. 55-C—1/4" O.D. Dehydrator. List Price, each\$3.90



LARGE STEEL DEHYDRATORS

Large size dehydrator for air conditioning and refrigeration. Steel shell 4 in. diameter: length 18", 24" and 36". Removable flange for refilling and cleaning. 1 1/2 inch female iron pipe thread on each end. Screens and steel wool furnished but no drier.

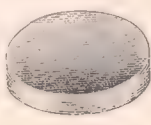
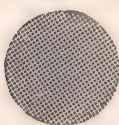
No. 518-C—Dehydrator with 18" shell. Overall length, 21 in. Capacity: 203 cu. in. Net weight Approx. 10 1/2 lbs. List Price Each\$ 85.00

No. 524-C—Dehydrator with 24" shell. Overall length, 27 in. Capacity: 274 cu. in. Net weight: Approx. 12 lbs. List Price Each 100.00

No. 536-C—Dehydrator with 36" shell. Overall length, 39 in. Capacity: 415 cu. in. Net weight: Approx. 15 lbs. List Price Each 140.00

SCREENS, FELTS and LEAD GASKETS

These screens, felt and gaskets are the same as those used in Imperial No. 304-C to 312-C Dehydrators, No. 55-C Dehydrators, and No. 48-C Strainer. Also for Imperial former No. 113-C Dehydrator.



For No. 55-C Dehydrator

No. 26904—Felt 1 3/8"x1 3/8". List Price, per 100.....\$5.10
No. 26905—Screen 1 3/8". List Price, per 100.....10.00
No. 26903—Lead Gasket 1 1/8"x7/8". List Price, per 100 12.30

For No. 48-C Strainer and 113-C, 304-C, 306-C, 309-C and 312-C Dehydrators

No. 29980—Felt 1 3/4"x1 1/4". List Price, per 100.....\$10.10
No. 29979—Screen 1 3/4". List Price, per 100..... 20.25
No. 32072—Lead Gasket 2"x1 3/4". List Price, per 100. 27.25



IMPERIAL NO. 185-C STRAINER

For protecting operating valves on commercial and multiple installations from scale or foreign matter. Straining area of 23 sq. in. of Phosphor Bronze 14 x 90 Dutch-Weave filter-cloth. Arrow indicates direction of flow. Length, 10" overall; 1/4" S.A.E. connection on each end. Dehydrated and capped with copper seal caps and flare nuts which may be used to connect strainer in line.

No. 185-C Imperial StrainerEach \$10.00

LIQUID LINE SCALE TRAP



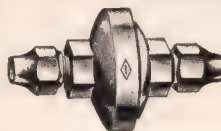
Protects operating valves on both commercial and multiple installations. Cylindrical shaped 120 mesh brass screen has area of about ten sq. in. Ample space between screen and wall of trap, to permit passage of refrigerant and trapping of any scale or foreign matter.

No. 64-C Copper Seal Cap and a No. 641-F Forged Nut on each end. Nuts can be used to connect trap to line. Length overall 7 3/8" inches.

No. 214-C 1/4" O.D. Liquid Line Scale Trap. List Price\$2.85
3/8" O.D. Liquid Line Scale Trap. List Price 3.00

§ New item.

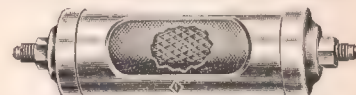
No. 48-C FORGED BRASS LINE STRAINER



Large inside capacity for all tube scale, compressor chips, or dirt in oil. Layer of special felt between two 120 mesh brass screens. Body of heavy brass forgings; threaded and soft soldered so it can be taken apart. Unless otherwise specified strainers will be furnished with nuts.

Size	List Price With Nuts	List Price Without Nuts
1/4" O.D.	\$2.70	\$2.30
5/16" O.D.	2.75	2.30
3/8" O.D.	2.80	2.30
1/2" O.D.	3.15	2.50
1/4" O.D. x 1/8" Male I.P.T.	2.50	2.30
1/4" O.D. x 1/4" Male I.P.T.	2.50	2.30
3/8" O.D. x 1/4" Male I.P.T.	2.60	2.30
3/8" O.D. x 3/8" Male I.P.T.	2.80	2.30
1/2" O.D. x 3/8" Male I.P.T.	2.85	2.50
3/8" Fem. S.A.E. x 1/4" Male S.A.E.	3.70	3.50
3/8" Fem. S.A.E. x 3/8" Male S.A.E.	3.80	3.55

IMPERIAL STRAINER WITH ASBESTOS SACK



These strainers are made from 2 inch O.D. copper tube and have brass forged ends. A 120 mesh screen and a closely woven asbestos cloth sack provide excellent straining properties.

Furnished with No. 640-F Flared Tube Cap Nuts.

No. 249-C

Size and Type Connection	2 1/2" Shell Overall Lgth. 5" Straining Area 6 Sq. In. List Price Each	5 1/2" Shell Overall Lgth. 8" Straining Area 17 3/4 Sq. In. List Price Each
1/4" Flare x 1/4" Flare	\$4.75	\$6.00
1/4" Flare x 1/4" Male I.P.T.	5.10	6.00
3/8" Flare x 3/8" Flare	5.10	6.00
3/8" Flare x 1/4" Male I.P.T. ....	...	6.40
1/2" Flare x 1/2" Flare ....	...	7.00
3/8" Fem. I.P.T. x 3/8" Fem. I.P.T. ....	...	7.00



IMPERIAL SEALED STRAINER 2 1/2" and 5 1/2" SHELLS

These strainers will remove all scale, compressor chips or dirt from the oil. Made from 2 inch O.D. copper tube with brass forged ends. Screen is 120 mesh. Furnished with No. 626-F Lead Protector Caps.

No. 248-C

Size and Type Connection	2 1/2" Shell Overall Lgth. 5" Straining Area 6 Sq. In. List Price Each	5 1/2" Shell Overall Lgth. 8" Straining Area 17 3/4 Sq. In. List Price Each
1/4" Flare x 1/4" Flare	\$4.00	\$5.50
1/4" Flare x 1/4" Male I.P.T.	4.35	5.85
3/8" Flare x 3/8" Flare	4.35	5.85
3/8" Flare x 1/4" Male I.P.T.	4.55	6.10
1/2" Flare x 1/2" Flare	5.10	6.60
3/8" Fem. I.P.T. x 3/8" Fem. I.P.T.	5.10	6.60

IMPERIAL STRAINER PACKED WITH WOOL



This strainer has a 120 mesh screen approximately 4 sq. in. in area. The inside of screen is packed with wool.

Scale, compressor chips, and dirt are deposited at the base of the screen, leaving the center free of foreign matter at all times. The wool filler removes small particles that are not taken out by the screen.

Overall length of strainer is 4 in.

Cat. No.	Inlet Connection	Outlet Connection	List Price Each
\$221-C	1/4" Male Flare	1/4" Male Flare	\$1.80
221-C	1/4" Female Flare	1/4" Male Flare	1.80
\$221-C	3/8" Male Flare	3/8" Male Flare	1.80
221-C	3/8" Female Flare	3/8" Male Flare	1.80

IMPERIAL STRAINER WITH FELT SACK

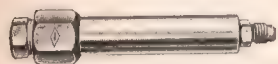


A small and very effective strainer with felt sack inside screen, providing a relatively large straining area. Has 3 3/4 sq. in. of 100 mesh screen. Shell is 1" hex.

A gasket is used in joint at inlet end, which insures tightness, yet permits easy removal of screen and sack for cleaning.

Catalog No.	Inlet	Outlet	Overall Length	List Price Each
188-C	1/4" Flare	1/4" Flare	3 7/8"	\$2.00
188-C	1/4" Male Flare	1/4" Fm. Flare	4 1/4"	2.00
188-C	1/4" Fem. Flare	1/4" Male Flare	4 1/4"	2.00
188-C	3/8" Flare	3/8" Flare	4 3/8"	2.00
188-C	1/4" I.P.T.	1/4" Flare	4 1/8"	2.00

IMPERIAL SERVICE STRAINER



This is a heavy-duty strainer furnished with 3 1/2 sq. in. of 100-mesh screen. This screen is renewable. Overall length of strainer is 5 in. Furnished with plug in inlet connection.

Cat. No.	Outlet Connection	Inlet Connection	List Price, Each
184-C	1/4" O.D. S.A.E.	1/2" O.D. S.A.E. (female)	\$2.40
184-C	3/8" O.D. S.A.E.	1/2" O.D. S.A.E. (female)	2.40
No. 33159	Screen only for 184-C		.44

IMPERIAL NO. 211-C HI-SIDE FLOAT



A positive control of the flow of the refrigerant into the evaporator under all conditions. Can be used with sulphur dioxide, methyl chloride or freon. Self-purging by means of adjustable bypass, which can be used also for manual purging. Maximum carrying capacity of approx. 1/2 ton.

All steel construction, copper hydrogen brazed throughout.

Internal parts are brass or bronze, eliminating corrosion. Inlet connection on top of float

1/4" Fem. I.P.T. Outlet connection 1/4" flare. Tested under 200 pounds pressure. Overall height 8 3/8". Widest diameter, 3 1/4".

No. 211-C Imperial Hi-Side Float, List Price Each..\$9.00†

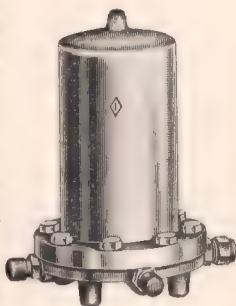
No. 211-CM Imperial Hi-Side Float replacement for Majestic.. Inlet 1/4" Fem. I.P.T., outlet 3/8" flare. List Price, Each 9.00†

NO. 210-C HI-SIDE FLOAT

Can be used with sulphur dioxide, methyl chloride or freon. Self-purging by means of a bypass from the high to the low side; can also be purged manually.

The bolted flange construction simplifies opening for inspection or repair. Needles of hardened, special alloy, non-corrosive, stainless steel. Tested under 200 pounds pressure. Shipped filled with oil. Overall height, 6 1/2". Diameter of flange 4".

No. 210-C Imperial Hi-Side Float, List Price, Each\$24.00

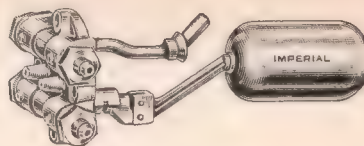


§ IMPERIAL LOADED CHECK VALVE

All parts in this Loaded Check Valve are made of brass or bronze, with the exception of the needles, which are made of non-corrosive, stainless steel.

1/4" male flare thread on both ends. Dehydrated and capped with 2 No. 640-F Cap Nuts.

No. 206-C Spring Loaded Check Valve, for sulphur dioxide, methyl chloride, or freon. Specify refrigerant to be used. List Price, Each\$3.50



IMPERIAL LOW SIDE FLOAT

Designed to fit the Mullins Evaporators.

The needle valve assembly is of a simple, well-tried design. Liquid level and skimmer level are set at factory. Will give about a 3/8" oil blanket.

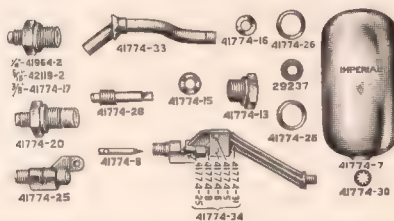
Forged brass header with four bolt holes on 2.859" centers. Header has capped shut-off valves at both inlet and outlet and screened inlet fitting.

Furnished with 1/4" flare connection on inlet and 1/4", 1/8" or 3/8" flare outlet. Furnished for right or left hand assembly. Unless otherwise specified, right hand assembly with 1/4" inlet and 3/8" outlet will be furnished.

No. 213-C Imperial Low Side Float. List Each\$24.00

\$No 222-C Lead Gasket. For use when float is used. with Mullins Evaporators. List Each09

REPLACEMENT PARTS FOR No. 213-C LOW SIDE FLOAT



Part No.	Description	List Price Each
29237	Packing	\$0.20
41774-5	Pivot Pin for Guide	.10
41774-6	Pin for Needle	.10
41774-7	Float	3.00
41774-8	Needle	1.80
41774-13	Cap	.26
41774-15	Headless Screw Plug	.14
41774-16	Washer	.10
41774-17	3/8" O.D. Flare Outlet (Suction Line) Connection	.70
41774-20	1/4" O.D. Flare Inlet (Liquid Line) Connection with screen	.90
41774-25	Needle Guide Assembly	1.60
41774-26	Gasket	.10
41774-28	Valve Stems	.40
41774-30	Lock Washers	.06
41774-31	Float Arm	2.00
41774-33	Skimmer Tube Assembly	.90
41774-34	Needle and Arm Assembly	5.00
41964-2	1/4" O.D. Flare Outlet (Suction Line) Connection	.70
42119-2	3/8" O.D. Flare Outlet (Suction line) Connection	.70

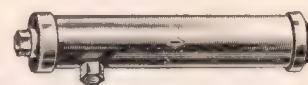
IMPERIAL ACCUMULATOR

The Imperial Accumulator is generally used with Imperial Hi-Side Floats Nos. 210-C, and 211-C. It is used to hold an auxiliary supply of refrigerant making the exact amount of charge less important. Should be installed in upright position.

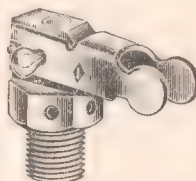
Made from copper tube 2 inches in outside diameter. 3/4" female I.P.T. at both inlet and outlet. Furnished in 8" or 12" length shell.

No. 216-C Accumulator with 8" length shell. Length overall 9 1/2", List Each\$8.35

No. 217-C Accumulator with 12" length shell. Length overall 13 1/2", List Each 9.50



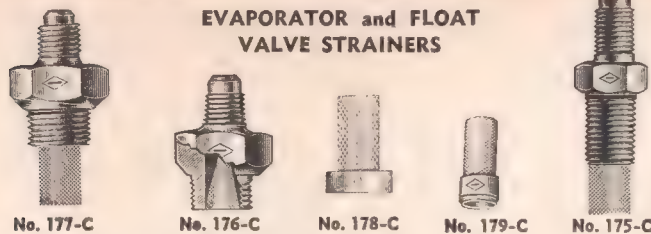
IMPERIAL NEEDLE VALVE ASSEMBLY



Replacement needle valve assembly for General Electric and Westinghouse Hi-Side Floats. Has stainless steel needle and special bronze alloy body.

When installing, base of float must be drilled and tapped for 1/8" Iron Pipe Thread.

No. 310-C Imperial Needle Valve Assembly. List Price, Each\$3.00

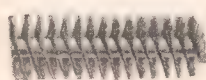


EVAPORATOR and FLOAT VALVE STRAINERS

Insurance against clogged evaporators and floats. Furnished with 120 x 108 mesh brass screen.

	List Price Each
No. 175-C 1/4" O.D. Tube x 1/4" I.P.T.....	\$0.90
No. 176-C 1/4" O.D. Tube x 5/8"-18 Thread	1.04
No. 177-C 1/4" O.D. x 5/8"-18 Thread	1.04
No. 178-C Replaces Kelvinator No. 6133 strainer used on float valve	0.80
No. 179-C Replaces Frigidaire No. 82332 strainer used on float valve	0.75

§ IMPERIAL CAPACITY BOOSTER (Heat-X-Changer) with Thermek Heat Transfer Surface



Thermek Surface

Designed to precool liquid refrigerant before it enters evaporator. Thermek Heat Transfer Surface gives higher heat transfer than any other type of heat exchanger. Used in place of "dryer" coils or when coil or compressor capacities are on edge and unable to take care of peak loads. Capacity booster raises back pressure of coil, increasing compressor efficiency; enables unit to utilize 100% of coil surface; reduces friction in tubing by preventing formation of flash gas; and prevents oil scrubbing caused by liquid refrigerant entering compressor. Results in lower operating cost, more machine capacity, and no frostbacks.

Place in liquid line just before expansion valve and in suction line just after evaporator so cold gas coming from evaporator precools warmer liquid refrigerant entering evaporator. Capacity equivalent to 100 ft. of suction and liquid line joined by soldering. Connections: 2 for liquid inlet and outlet; 2 for coil suction inlet and outlet. No. 450-3C (illustrated) a small, inexpensive unit for ice cream cabinets, beverage coolers, display cases and small units where space is a factor.

Cat. No.	Capacity of Cooling Unit B.T.U. Per Hr.	Overall Length or Height Inches	CONNECTIONS Inches		List Price Each
			Liquid	Suction	
450-3C	3,000	9 3/8	1/4 Flare	1/2 Flare	
	(In lots 1 - 9)				\$ 8.06
	(In lots 10-24)				7.33
	(In lots 25-49)				6.60
450-4C	4,000	9	1/4 Flare	1/2 Flare	13.13
450-6C	6,000	12	1/4 Flare	3/8 Flare	16.20
450-12C	12,000	19	3/8 Flare	3/4 Flare	19.82
450-36C	36,000	18	1/2 O.D. Solder	1 1/8 O.D. Solder	31.10
450-60C	60,000	25	5/8 O.D. Solder	1 5/8 O.D. Solder	35.64
450-120C	120,000	40 High	3/4 O.D. Solder	2 1/8 O.D. Solder	101.49
450-180C	180,000	40 High	7/8 O.D. Solder	2 5/8 O.D. Solder	129.81
450-300C	300,000	40 High	1 3/8 O.D. Solder	3 5/8 O.D. Solder	209.59
450-600C	600,000	66 High	1 5/8 O.D. Solder	4 1/2 O.D. Solder	333.19

§ New item.

§ IMPERIAL COIL SPACER AND SUPPORT

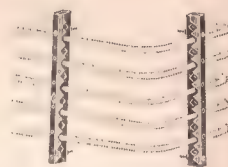
The Imperial Coil Spacer and Support is for use when making up evaporator coils for beverage coolers, milk coolers, etc. The spacer provides a permanent method of holding coils in position. Spacer and bolts are made of brass, and will not rust.

The spacer is 25 inches long, and coils can be adjusted to any distance in spacings of 1 inch multiples. Will take tubing from 3/8 inch to 3/4 inch, outside diameter.

Can be cut with a hack saw if a shorter length is desired.

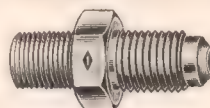
No. 225-C Imperial Coil Spacer and Support.

List Price, Each\$2.85



IMPERIAL EXTRA HEAVY FITTINGS

These fittings are made with extra heavy bodies and shoulders. The flare threads and iron pipe threads are made extra long. Tees and elbows are made from brass forgings, and will not crack or split. All tube ends of fittings are covered with tube protectors to prevent S.A.E. threads and seats from being nicked or marred.

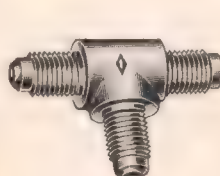


NO. 627-F EXTRA HEAVY HALF
UNION

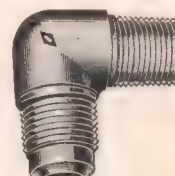
Outside Diam. of Tube	Iron Pipe Thread	List Price Per 100	Outside Diam. of Tube	Iron Pipe Thread	List Price Per 100
1/4	1/8".....	\$ 46.00	1/2	3/8".....	104.00
1/4	1/4".....	46.00	1/2	1/2".....	104.00
1/4	3/8".....	104.00	1/2	1/4".....	104.00
3/8	3/8".....	104.00	5/8	1/2".....	138.00
3/8	1/4".....	92.00	5/8	3/8".....	150.00

NO. 628-F EXTRA HEAVY UNION

Outside Diam. of Tube	List Price Per 100
1/4"	\$ 51.00
3/8"	81.00
1/2"	92.00
5/8"	143.00



No. 629-F Tee



No. 630-F
Elbow



No. 631-F
Elbow

Cat. No.	Size	List Price Per 100
No. 629-F	1/4" O.D. x 1/4" O.D. x 1/4" O.D.	\$ 69.00
No. 630-F	1/2" O.D. x 3/8" I.P.T.	138.00
No. 631-F	1/4" Male I.P.T. x 1/4" Fem. I.P.T.	100.00

NO. 632-F EXTRA HEAVY NIPPLE

Iron Pipe Thread	List Price Per 100
1/8"	\$ 58.00
1/4"	92.00
1/4" x 1/8"	110.00
3/8"	104.00
3/8" x 1/4"	122.00
1/2"	117.00



IMPERIAL TRIPLE-SEAL FLARE FITTINGS for Refrigeration and Air Conditioning

The fitting that remains leak-proof even when the seat has been badly nicked or marred

The New Imperial Triple-Seal Flare Fitting† brings a new, extra protection against leakage to refrigeration fitting connection work.

This fitting is the same excellent SAE refrigeration type fitting you have previously used except that it has an important improvement. It is made with a groove in its seat as shown in the accompanying diagram. When the flare is drawn up against this groove the copper tubing is extended into the groove making a self-seating joint. This joint will remain leak-proof even though the face of the seat may be badly nicked or marred.

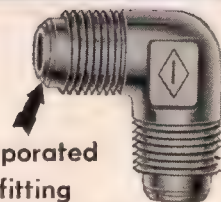
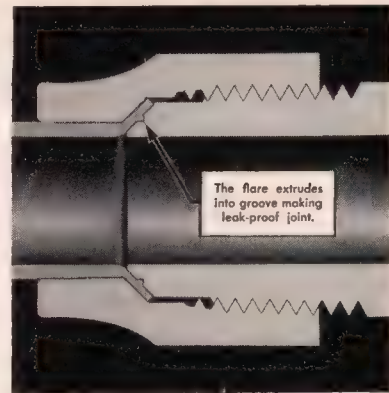
This provides an extra safety seal which is of the greatest importance in refrigeration work.

All Imperial refrigeration flare fittings are designed especially for this service. Nuts, tees, elbows and crosses are made from brass forgings. This assures a fine grain structure, freedom from internal stress, and a high tensile strength. It eliminates any possibility of seepage of refrigerants or of cracking or splitting.

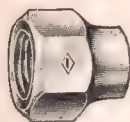
Unions and cap nuts are made from extruded bronze rod which because of its higher copper content is not subject to season cracking.

Flats are placed on elbows and tees. This gives a wrench hold, eliminating the possibility of distorting the body in gripping the fitting, and also speeds up work materially.

Imperial fittings are put up in 2 color boxes in standard package quantities.



NO. 641-F NUT Made from Brass Forging



Outside Diameter of Tube	List Price Per 100	Outside Diameter of Tube	List Price Per 100
3/8"	\$21.00	7/8"	\$32.00
1/4"	21.00	1 1/2"	32.00
5/8"	22.00	5/8"	50.00
3/8"	26.00	3/4"	80.00

NO. 641-FS SHORT NUT Made from Brass Forging

Outside Diameter of Tube	List Price Per 100	Outside Diameter of Tube	List Price Per 100
3/8"	\$20.00	7/8"	\$30.00
1/4"	20.00	1 1/2"	30.00
5/8"	21.00	5/8"	48.00
3/8"	25.00	3/4"	76.00



NO. 641-FP FROST PROOF NUT Made from Brass Forging

Has annulus around tube, pierced by a series of holes which allow ice to expand without squeezing tube.



3/8"	\$ 35.00	7/8"	\$ 55.00
1/4"	35.00	1 1/2"	55.00
5/8"	38.00	5/8"	72.00
3/8"	45.00	3/4"	110.00

NO. 662-F REDUCING NUT Made from Brass Forging

Size	List Price Per 100	Size	List Price Per 100
1/4" x 3/8"	\$29.00	7/8" x 3/8"	\$40.00
1/8" x 1/2"	30.00	1/2" x 3/8"	40.00
1/8" x 1/4"	30.00	1/2" x 1/2"	40.00
3/8" x 1/4"	34.00	5/8" x 1/2"	58.00
3/8" x 1/8"	34.00	3/4" x 5/8"	88.00



NO. 662-FS SHORT REDUCING NUT Made from Brass Forging

Size	List Price Per 100	Size	List Price Per 100
1/4" x 3/8"	\$28.00	1/2" x 3/8"	\$38.00
1/8" x 1/4"	29.00	5/8" x 1/2"	56.00
3/8" x 1/4"	33.00	3/4" x 5/8"	84.00

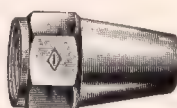
NO. 640-FB FLARED TUBE CAP NUTS

Made from Extruded Bronze Rod to eliminate season cracking. Furnished with one gasket.

Outside Diam. of Tube	List Price Per 100
1/8"	\$11.50
1/4"	13.00
3/8"	17.00
1/2"	23.50
5/8"	29.00
3/4"	35.00
1"	53.00
1 1/4"	88.00



NO. 41-F NUT



Made from extruded rod. For use on water lines.

Outside Diam. of Tube	List Price Per 100	
	Long	Short
1/8"	\$11.50	\$10.50
1/4"	14.00	12.50
3/8"	18.50	16.00
1/2"	30.00	26.00
5/8"	51.00	38.00
3/4"	51.00	38.00
1"	99.00	81.00
1 1/4"	127.00	104.00

NO. 642-F UNION

Outside Diam. of Tube	List Price Per 100
1/8"	\$ 23.00
1/4"	23.00
3/8"	30.00
1/2"	39.00
5/8"	53.00
3/4"	53.00
1"	87.00
1 1/4"	150.00



NO. 648-F HALF UNION



Outside Diam. of Tube	Iron Pipe Thread	List Price Per 100	Outside Diam. of Tube	Iron Pipe Thread	List Price Per 100
3/8"	1/8"	\$17.50	1/8"	3/8"	\$ 51.00
1/4"	1/8"	18.50	1/2"	1/8"	51.00
1/4"	1/4"	23.00	1/2"	1/4"	51.00
1/4"	3/8"	41.00	1/2"	3/8"	41.00
1/4"	1/2"	58.00	1/2"	1/2"	51.00
1/8"	1/8"	28.00	3/4"	1/2"	138.00
1/8"	1/4"	32.00	3/4"	3/4"	81.00
1/8"	3/8"	41.00	3/4"	1 1/4"	81.00
1/8"	1/2"	39.00	3/4"	1 1/2"	71.00
3/8"	1/8"	30.00	3/4"	3/4"	138.00
3/8"	1/4"	41.00	3/4"	1/2"	138.00
3/8"	3/8"	58.00	3/4"	1/4"	138.00
3/8"	1/2"	51.00	3/4"	3/4"	138.00

† Not yet available in all sizes. However, will be furnished as soon as tools are completed.

NO. 656-F FLARED REDUCING UNION

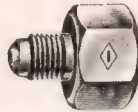


Outside Diam. of Tube	List Price Per 100	Outside Diam. of Tube	List Price Per 100
1/4" to 3/8"	\$48.00	1/2" to 7/8"	\$ 71.00
1/8" to 1/4"	48.00	5/8" to 1/4"	106.00
3/8" to 1/4"	58.00	5/8" to 3/8"	106.00
3/8" to 1/8"	58.00	5/8" to 1/2"	106.00
7/8" to 3/8"	71.00	3/4" to 3/8"	168.00
1/2" to 1/4"	71.00	3/4" to 1/2"	168.00
1/2" to 1/8"	71.00	3/4" to 5/8"	168.00
1/2" to 3/8"	71.00		

NO. 661-F FEMALE FLARE TO MALE FLARE REDUCER

Furnished with one Gasket

Made from Extruded Bronze Rod to eliminate season cracking.



O.D. of Tube Male End	List Price Per 100	O.D. of Tube Female End	List Price Per 100
1/4" to 3/8"	\$60.00	1/2" to 3/8"	\$ 81.00
3/8" to 1/4"	60.00	5/8" to 3/8"	81.00
1/4" to 1/4"	60.00	1/4" to 1/2"	101.00
1/8" to 1/4"	60.00	1/4" to 1/2"	101.00
3/8" to 1/4"	60.00	3/8" to 1/2"	101.00
1/2" to 1/4"	60.00	3/8" to 1/2"	143.00
1/4" to 1/8"	69.00	1/2" to 1/2"	143.00
3/8" to 1/8"	69.00	1/2" to 3/8"	143.00
1/2" to 1/8"	81.00	3/4" to 3/8"	253.00
1/4" to 3/8"	81.00		
1/8" to 3/8"	99.00		

NO. 646-F FEMALE COUPLING Flare to Female Pipe

Made from Extruded Bronze Rod to eliminate season cracking.



Outside Diam. of Tube	Iron Pipe Thread	List Price Per 100	Outside Diam. of Tube	Iron Pipe Thread	List Price Per 100
1/8"	1/8"	\$23.00	1/8"	1/4"	\$ 67.00
1/4"	1/8"	23.00	1/2"	1/4"	67.00
1/4"	1/4"	39.00	1/2"	3/8"	58.00
1/4"	3/8"	67.00	1/2"	1/2"	124.00
1/4"	1/2"	124.00	3/8"	1/2"	124.00
1/4"	3/4"	30.00	3/8"	3/4"	124.00
1/4"	1"	48.00	3/8"	1"	115.00
3/8"	1/8"	48.00	3/8"	3/4"	253.00
3/8"	1/4"	39.00	3/8"	1/2"	230.00
3/8"	3/8"	67.00	3/8"	3/4"	253.00

NO. 664-F FEMALE COUPLING Female Flare to Male Pipe. Furnished with one Gasket

Made from Extruded Bronze Rod to eliminate season cracking.



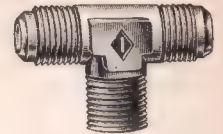
Female Flare	Iron Pipe Thread	List Price Per 100	Female Flare	Iron Pipe Thread	List Price Per 100
1/4"	1/8"	\$60.00†	1/2"	1/4"	\$101.00†
1/2"	1/8"	60.00†	1/2"	3/8"	101.00†
3/8"	1/4"	69.00†	3/8"	3/8"	143.00†
3/8"	1/4"	81.00†	3/8"	1/2"	143.00†

NO. 644-F TEE Made from Brass Forging

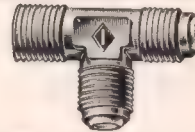


Outside Diameter of Tube	List Price Per 100	Outside Diameter of Tube	List Price Per 100
3/8"	\$53.00	7/8"	\$ 97.00
1/4"	53.00	1/2"	97.00
1/8"	60.00	5/8"	150.00
3/8"	69.00	3/4"	299.00

NO. 645-F TEE Made from Brass Forging



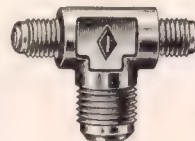
Outside Diameter of Tube	Iron Pipe Thread	List Price Per 100	Outside Diameter of Tube	Iron Pipe Thread	List Price Per 100
3/8"	1/8"	\$51.00	7/8"	1/4"	\$113.00
1/4"	1/8"	51.00	1/8"	3/8"	113.00
1/4"	1/4"	85.00	1/2"	1/4"	113.00
1/4"	3/8"	113.00	1/2"	3/8"	94.00
1/4"	1/2"	156.00	1/2"	1/2"	156.00
1/8"	1/8"	58.00	5/8"	3/8"	156.00
1/8"	1/4"	94.00	5/8"	1/2"	147.00
3/8"	1/8"	85.00	5/8"	3/4"	294.00
3/8"	1/4"	67.00	3/4"	1/2"	294.00
3/8"	3/8"	113.00	3/4"	3/4"	294.00
3/8"	1/2"	156.00	3/4"	1/8" F.I.P.T.	113.00



NO. 651-F TEE Made from Brass Forging

Outside Diameter of Tube	Iron Pipe Thread	List Price Per 100	Outside Diameter of Tube	Iron Pipe Thread	List Price Per 100
3/8"	1/8"	\$ 51.00	7/8"	1/4"	\$113.00
1/4"	1/8"	51.00	1/8"	3/8"	113.00
1/4"	1/4"	85.00	1/2"	1/4"	113.00
1/4"	3/8"	113.00	1/2"	3/8"	94.00
1/8"	1/8"	58.00	1/2"	1/2"	156.00
1/8"	1/4"	85.00	5/8"	3/8"	156.00
3/8"	1/8"	85.00	5/8"	1/2"	147.00
3/8"	1/4"	67.00	3/4"	1/2"	294.00
3/8"	3/8"	113.00	3/4"	3/4"	294.00

NO. 684-F TEE Made from Brass Forging



Outside Diameter of Tube	List Price Per 100
1/4" x 1/4" x 3/8"	\$ 97.00
1/4" x 1/4" x 1/2"	124.00
3/8" x 3/8" x 1/2"	124.00
3/8" x 3/8" x 3/4"	177.00
1/2" x 1/2" x 3/8"	177.00
1/2" x 1/2" x 1/2"	327.00
5/8" x 5/8" x 3/4"	327.00

NO. 685-F TEE Made from Brass Forging



Outside Diameter of Tube	List Price Per 100
1/4" x 3/8" x 1/4"	\$ 97.00
1/4" x 1/2" x 1/4"	124.00
1/4" x 3/8" x 1/2"	177.00
3/8" x 1/2" x 3/8"	124.00
1/2" x 3/8" x 1/2"	177.00
1/2" x 3/4" x 1/2"	327.00
5/8" x 3/4" x 3/8"	327.00



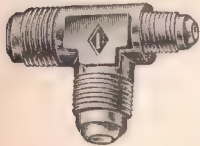
NO. 659-F TEE Made from Brass Forging



Outside Diameter of Tube	List Price Per 100
1/8" x 1/8" x 1/4"	\$ 87.00
3/8" x 3/8" x 1/4"	97.00
1/2" x 1/2" x 1/4"	124.00
1/2" x 1/2" x 3/8"	124.00
5/8" x 5/8" x 1/4"	177.00
5/8" x 5/8" x 3/8"	177.00
5/8" x 5/8" x 1/2"	177.00
3/4" x 3/4" x 1/4"	327.00
3/4" x 3/4" x 3/8"	327.00
3/4" x 3/4" x 1/2"	327.00
3/4" x 3/4" x 5/8"	327.00

† Price change.

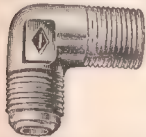
NO. 658-F TEE — Made from Brass Forging



Outside Diameter of Tube	List Price Per 100
3/8" x 1/4" x 3/8"	\$ 87.00
1/2" x 1/4" x 1/2"	97.00
1/2" x 1/4" x 1/2"	124.00
5/8" x 3/8" x 1/2"	124.00
5/8" x 1/4" x 3/8"	177.00
3/4" x 1/2" x 3/8"	177.00
3/4" x 1/2" x 3/4"	327.00
3/4" x 3/8" x 3/4"	327.00

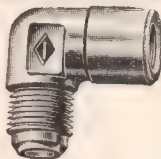
NO. 657-F ELBOW — Made from Brass Forging

Outside Diameter of Tube	List Price Per 100	Outside Diameter of Tube	List Price Per 100
1/8" to 1/4"	\$ 67.00	5/8" to 1/4"	133.00
3/8" to 1/4"	76.00	5/8" to 3/8"	133.00
1/2" to 1/4"	99.00	5/8" to 1/2"	133.00
1/2" to 5/8"	99.00	3/4" to 3/8"	225.00
1/2" to 3/8"	99.00	3/4" to 1/2"	225.00
1/2" to 1/2"	99.00	3/4" to 5/8"	225.00



NO. 649-F ELBOW Made from Brass Forging

Outside Diameter of Tube	Iron Pipe Thread	List Price Per 100	Outside Diameter of Tube	Iron Pipe Thread	List Price Per 100
3/8"	1/8"	\$ 29.00	1/2"	1/4"	\$ 64.00
1/4"	1/8"	29.00	1/2"	3/8"	74.00
1/4"	1/4"	41.00	1/2"	1/2"	74.00
1/4"	3/8"	64.00	1/2"	3/8"	64.00
1/4"	1/2"	106.00	1/2"	1/2"	106.00
1/8"	1/8"	35.00	1/2"	3/4"	196.00
1/8"	1/4"	51.00	5/8"	1/4"	115.00
1/8"	3/8"	64.00	5/8"	3/8"	115.00
3/8"	1/8"	51.00	5/8"	1/2"	97.00
3/8"	1/4"	41.00	5/8"	3/4"	196.00
3/8"	3/8"	64.00	3/4"	1/2"	196.00
3/8"	1/2"	106.00	3/4"	3/4"	196.00



NO. 650-F ELBOW Made from Brass Forging

Outside Diameter of Tube	Iron Pipe Thread	List Price Per 100	Outside Diameter of Tube	Iron Pipe Thread	List Price Per 100
1/8"	1/8"	\$ 44.00	1/2"	1/4"	\$ 92.00
1/4"	1/8"	44.00	1/2"	3/8"	101.00
1/4"	1/4"	58.00	1/2"	1/4"	92.00
1/8"	1/8"	51.00	1/2"	3/8"	92.00
1/8"	1/4"	67.00	1/2"	1/2"	207.00
3/8"	1/8"	67.00	5/8"	1/4"	138.00
3/8"	1/4"	58.00	5/8"	3/8"	138.00
3/8"	3/8"	92.00	5/8"	1/2"	230.00
3/8"	1/2"	230.00	3/4"	1/2"	230.00

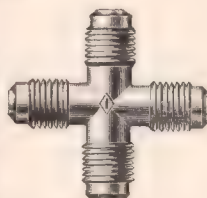
NO. 655-F ELBOW — Made from Brass Forging

Outside Diameter of Tube	List Price Per 100	Outside Diameter of Tube	List Price Per 100
1/8"	\$ 41.00	1/2"	\$ 81.00
1/4"	41.00	1/2"	81.00
1/8"	48.00	5/8"	115.00
3/8"	58.00	3/4"	207.00



NO. 652-F CROSS — Made from Brass Forging

Outside Diameter of Tube	List Price Per 100
1/8"	\$115.00
1/4"	115.00
1/8"	138.00
3/8"	161.00
1/2"	207.00
1/2"	207.00
5/8"	345.00



NO. 639-F FLARED TUBE SEALING PLUG

Outside Diameter of Tube	List Price Per 100	Outside Diameter of Tube	List Price Per 100
1/8" ...	\$ 14.00	1/2" ...	35.00
1/4" ...	14.00	1/2" ...	35.00
5/8" ...	18.50	5/8" ...	58.00
3/8" ...	23.00	3/4" ...	110.00



NO. 660-F MULTIPLE VALVE CONNECTION

Made from Extruded Bronze Rod to eliminate season cracking.

Two Gaskets Furnished

Outside Diam. of Tube	List Price Per 100	Outside Diam. of Tube	List Price Per 100
1/8"	\$ 41.00	1/2"	\$ 83.00
1/4"	41.00	1/2"	83.00
1/8"	55.00	3/4"	124.00
3/8"	62.00	3/4"	253.00

NO. 90-C HOSE CONNECTOR

Hose Size Inside Diam.	Iron Pipe Thread	List Price Per 100
1/4"	1/8"	\$ 66.00
3/8"	1/4"	76.00
1/2"	3/8"	83.00
5/8"	3/8"	83.00
5/8"	1/2"	198.00



No. 64-C FLARED TUBE COPPER SEAL CAP No. 625-F COPPER FLARE GASKET

LIST PER 100



No. 64-C

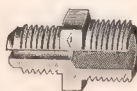


No. 625-F

Size	64-C	625-F	Size	64-C	625-F
1/8"	\$4.00	\$4.00	1/2"	\$ 8.50	\$7.00
1/4"	4.00	4.00	1/2"	9.00	8.00
1/8"	6.00	5.00	5/8"	11.50	10.00
3/8"	7.00	6.00	3/4"	18.50	14.00

FUSIBLE HALF UNION—250° Fusible Metal

Relieves high pressure caused by excessive heat. Furnished with Fusible Metal to melt at approximately 250°F. Attached in the high side and vented to the atmosphere.

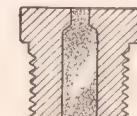


Per 100

No. 248-F 1/4" Flared Tube x 1/4" Male Iron Pipe Thread.....	\$56.00
No. 248-F 1/4" Flared Tube x 3/8" Male Iron Pipe Thread.....	78.00
No. 248-F 3/8" Flared Tube x 3/8" Male Iron Pipe Thread.....	80.00

NO. 621-F FUSIBLE PLUG

These safety plugs will relieve high pressures caused by excessive heat. Furnished with Fusible Metal to melt at approximately 165°F. or 250°F. Unless otherwise specified 165°F. type will be furnished. All sizes are tapered iron pipe thread.



Per 100

No. 621-F 1/8" Iron Pipe Thread	\$40.00
No. 621-F 1/4" Iron Pipe Thread	50.00
No. 621-F 3/8" Iron Pipe Thread	70.00

NO. 626-F LEAD PROTECTOR CAP

To cover threads and seats of valves, and protect them from being scratched or defaced. Size of each cap plainly stamped on outside

No. 626-F—Per 100

1/4"	\$4.50	1/2"	\$ 9.50
1/8"	6.00	5/8"	11.50
3/8"	9.00	1/2" I.P.T.	10.50

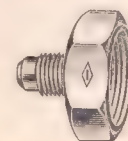


CYLINDER ADAPTERS

Machined on one end to fit large refrigerant cylinders. They are used when filling small service tanks. Furnished with a fibre gasket to give a tight non-leaking coupling.

List Each

215-C 1/2" Straight Female I.P.T. x 1/4" S.A.E....	\$1.20
215-C 3/4" Straight Female I.P.T. x 1/4" S.A.E....	1.20
215-C 3/4" Straight Female I.P.T. x 3/8" S.A.E....	1.65
215-C 3/4" Straight Female I.P.T. x 1/2" S.A.E....	1.65
33730 Gasket for 1/2" Female I.P.T. ....	.03
33265 Gasket for 3/4" Female I.P.T. ....	.03



IMPERIAL BRASS PIPE FITTINGS

All prices are per 100 fittings

The elbows, tees and crosses listed below are made from Brass Forgings and are not subject to season cracking. The couplings and bushings are made from Extruded Bronze Rod to eliminate season cracking.

The Brass Pipe Fittings listed below are for use on water and air lines.

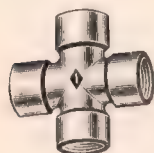


NO. 100-BF ELBOW

1/8"	\$ 65.00
1/4"	90.00
3/8"	180.00
1/2"	290.00

NO. 101-BF TEE

1/8"	\$ 90.00
1/4"	120.00
3/8"	200.00
1/2"	350.00



NO. 102-BF CROSS

1/8"	\$150.00
1/4"	175.00
3/8"	350.00

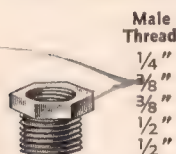
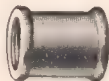


NO. 116-BF STREET ELBOW

1/8"	\$ 70.00
1/4"	95.00
3/8"	160.00
1/2"	220.00

NO. 103-BR COUPLING

1/8"	\$22.00
1/4"	37.00
3/8"	56.00
1/2"	98.00



NO. 110-BR BUSHING

Male Thread	Female Thread	
1/4"	1/8"	\$18.00
3/8"	1/4"	26.00
1/2"	3/8"	26.00
1/2"	1/2"	39.00
3/4"	1/2"	39.00
1"	3/4"	69.00
1 1/4"	1"	69.00
1 1/2"	1 1/4"	92.00

NO. 26994—PURGE PLUG

For use on Compressor Valves shown on page 6.
Has 3/8" hex.—1/8" I.P.T.

List Price Per 100\$19.50



NO. 100-B ELBOW



1/8"	\$21.40
1/4"	30.40
3/8"	60.80
1/2"	96.80

NO. 101-B TEE

1/8"	\$30.40
1/4"	41.60
3/8"	67.50
1/2"	123.80



NO. 102-B CROSS



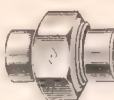
1/8"	\$47.30
1/4"	57.40
3/8"	86.60
1/2"	132.80

NO. 103-B COUPLING

1/8"	\$19.10
1/4"	32.60
3/8"	48.40
1/2"	85.50



NO. 104-B UNION



1/8"	\$82.10
1/4"	115.90
3/8"	132.80
1/2"	172.10

NO. 110-B BUSHING

Male Thrd.	Fem. Thrd.	
1/4"	1/8"	\$15.80
3/8"	1/4"	22.50
1/2"	3/8"	22.50
1/2"	1/2"	33.80
3/4"	1/2"	33.80
1"	3/4"	60.00
1 1/4"	1"	60.00
1 1/2"	1 1/4"	80.00



NO. 112-B CLOSE NIPPLE



1/8"	\$14.60
1/4"	20.30
3/8"	33.80
1/2"	48.40

NO. 113-B NIPPLE

I.P.T.	Lgth.	
1/8"	1 1/2"	\$20.30
1/4"	1 1/2"	27.00
3/8"	1 1/2"	36.00
1/2"	1 1/2"	56.30
1/8"	2"	24.80
1/4"	2"	32.60
3/8"	2"	43.90
1/2"	2"	61.90

I.P.T.	Lgth.	
1/8"	2 1/2"	\$28.10
1/4"	2 1/2"	37.10
3/8"	2 1/2"	47.30
1/2"	2 1/2"	69.80
1/8"	3"	30.40
1/4"	3"	40.50
3/8"	3"	56.30
1/2"	3"	76.50



NO. 116-B STREET ELBOW



1/8"	\$23.60
1/4"	32.60
3/8"	54.00
1/2"	73.10

NO. 119-B Reducing Coupling

Fem. Thrd.	
1/4"	1/8" \$25.90
3/8"	1/4" 38.30
1/2"	3/8" 49.50



NO. 120-B ADAPTER



Fem. Thrd.	Male Thrd.	
1/8"	1/8"	\$23.60
1/4"	1/8"	25.90
3/8"	1/4"	38.30
1/2"	3/8"	49.50

NO. 121-B PLUG

1/8"	\$14.60
1/4"	18.00
3/8"	24.80
1/2"	37.10
3/4"	92.50



NO. 122-B HEX. NIPPLE



1/8" x 1/8"	\$16.90
1/4" x 1/4"	22.50
3/8" x 3/8"	28.10
1/2" x 1/2"	33.70

NO. 123-B REDUCING NIPPLE

1/4" x 1/8"	\$25.90
3/8" x 1/4"	38.30



NO. 124-B 45° STREET ELBOW

1/8"	\$24.55
1/4"	35.80
3/8"	53.20
1/2"	65.40

NO. 130-B ADAPTER

Has Extra Long Male Pipe Thread

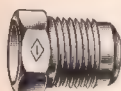
1/8" x 1/8"	\$31.00
1/4" x 1/4"	33.00
3/8" x 3/8"	44.00
1/2" x 1/2"	54.00



IMPERIAL S.A.E. ALUMINUM ALLOY FITTINGS

These Aluminum Alloy Flare Tube Couplings are for use with ammonia, gas or where a light weight coupling is required. These couplings are all treated with a special thread lubricant, are free from chips and of good appearance. All tees and elbows are made from forgings.

No. 39-AL PLUG



O.D.	List Price Per 100	O.D.	List Price Per 100
3/8"	\$ 8.00	1/2"	\$20.55
1/4"	8.80	5/8"	35.20
1/8"	10.25	3/4"	61.60
3/16"	14.65	1"	93.35
1/16"	17.60		

No. 40-AL CAP

O.D.	List Price Per 100	O.D.	List Price Per 100
3/8"	\$ 5.85	1/2"	\$17.60
1/4"	6.60	5/8"	26.40
1/8"	8.00	3/4"	44.00
3/16"	11.75	1"	66.65
1/16"	14.65		



No. 41-AL NUT



O.D.	List Price Per 100	O.D.	List Price Per 100
3/8"	\$ 5.85	1/2"	\$ 32.25
1/4"	8.80	5/8"	58.65
1/8"	12.45	3/4"	66.00
3/16"	20.55	1"	93.35
1/16"	26.40		

No. 641-AL NUT



O.D.	List Price Per 100
1/4"	\$19.05
3/8"	29.35
1/2"	36.65
5/8"	49.85
3/4"	73.35

No. 42-AL UNION

O.D.	List Price Per 100	O.D.	List Price Per 100
3/8"	\$ 13.20	1/2"	\$32.25
1/4"	13.20	5/8"	55.75
1/8"	17.60	3/4"	99.75
3/16"	21.25	1"	133.35
1/16"	27.85		

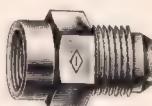


No. 48-AL HALF UNION

O.D.	I.P.T.	List Price Per 100	O.D.	I.P.T.	List Price Per 100
3/8"	1/8"	\$ 10.25	1/2"	1/4"	\$21.25
1/4"	1/8"	11.00	5/8"	3/8"	24.95
1/8"	1/4"	17.60	1/2"	1/2"	36.65
3/16"	1/8"	13.20	5/8"	1/2"	41.05
1/16"	1/4"	23.45	3/4"	1/2"	88.00
3/8"	1/8"	23.45	3/4"	3/4"	88.00
1/4"	1/4"	17.25	1"	3/4"	120.00

No. 46-AL FEMALE COUPLING

O.D.	I.P.T.	List Price Per 100	O.D.	I.P.T.	List Price Per 100
1/4"	1/8"	\$13.95	1/2"	3/8"	\$36.65
3/8"	1/8"	17.60	5/8"	1/2"	66.00
1/2"	1/4"	22.00	1"	3/4"	180.00
3/4"	1/4"	29.35			



No. 49-AL ELBOW

O.D.	I.P.T.	List Price Per 100	O.D.	I.P.T.	List Price Per 100
1/4"	1/8"	\$ 37.80	1/2"	3/8"	\$ 68.45
1/4"	1/4"	43.50	1/2"	1/2"	78.70
3/8"	1/8"	42.45	5/8"	1/2"	85.55
1/2"	1/4"	48.80	3/4"	1/2"	118.55
3/8"	1/8"	62.95	3/4"	3/4"	136.35
1/2"	1/4"	54.75	1"	3/4"	195.55
3/4"	1/4"	64.05			

No. 50-AL ELBOW



O.D.	I.P.T.	List Price Per 100
1/4"	1/8"	\$ 48.90
3/8"	1/8"	49.50
1/2"	1/4"	61.60
3/4"	1/4"	66.00
1"	3/8"	80.65
	3/4"	225.00

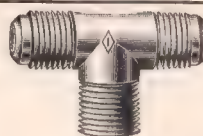
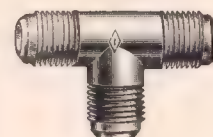
No. 55-AL ELBOW

O.D.	List Price Per 100	O.D.	List Price Per 100
1/4"	\$ 38.75	1/2"	\$ 70.90
3/8"	44.50	5/8"	89.25
1/2"	56.25	3/4"	127.75
3/4"	67.85	1"	195.55



No. 44-AL TEE

O.D.	List Price Per 100	O.D.	List Price Per 100
3/8"	\$ 56.70	1/2"	\$105.10
1/4"	56.70	5/8"	131.40
1/8"	63.55	3/4"	172.35
3/16"	79.20	1"	268.90
1/16"	102.05		

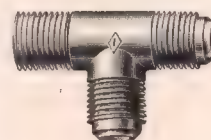


No. 45-AL TEE

O.D.	I.P.T.	List Price Per 100	O.D.	I.P.T.	List Price Per 100
3/8"	1/8"	\$ 56.25	1/2"	1/4"	\$97.80
1/4"	1/8"	56.25	5/8"	3/8"	105.10
1/8"	1/4"	64.70	3/4"	1/2"	131.40
3/16"	1/8"	61.10	3/4"	1/2"	172.35
1/2"	1/8"	90.00	1"	3/4"	198.20
3/4"	1/4"	78.25			268.90

No. 51-AL TEE

O.D.	I.P.T.	List Price Per 100
1/4"	1/8"	\$ 56.25
1/4"	1/4"	64.70
3/8"	1/8"	61.10
3/8"	1/8"	90.00
1/2"	1/4"	78.25
1/2"	1/4"	97.80
3/4"	3/8"	105.10
3/4"	1/2"	131.40
1"	1/2"	172.35
	3/4"	268.90

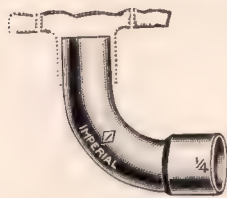


IMPERIAL PRECISION WROUGHT COPPER FITTINGS

Imperial Precision Wrought Copper Fittings are drawn from copper tubing and are of one piece construction. They are manufactured to very close tolerances, thus assuring a close fit between the cup of the fitting and the O.D. of the tube—an important advantage in making quick, secure solder joints.

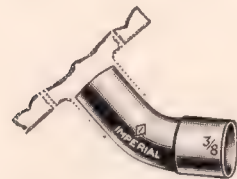
These fittings give full flow and their light weight reduces heating time in soldering.

Each fitting is stamped with its O.D. size. Where there are different sizes, each end is individually marked. This is a big convenience in identifying fittings—eliminates confusion with nominal sizes.



No. 116-S
90° STREET ELBOW
Fitting to Copper

O.D. Tube Size	List Price Each	O.D. Tube Size	List Price Each
1/4"	\$0.15	1 3/8"	\$0.84
3/8"	.15	1 5/8"	1.15
1/2"	.15	2 1/8"	1.65
5/8"	.18	2 5/8"	3.05
3/4"	.23	3 1/8"	4.60
7/8"	.30	3 5/8"	6.65
1 1/8"	.55	4 1/8"	8.70



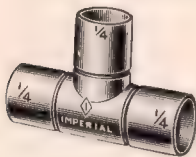
No. 124-S
45° STREET ELBOW
Fitting to Copper

O.D. Tube Size	List Price Each	O.D. Tube Size	List Price Each
3/8"	\$0.15	1 5/8"	\$1.15
1/2"	.15	2 1/8"	1.65
5/8"	.18	2 5/8"	3.05
3/4"	.23	3 1/8"	4.60
7/8"	.30	3 5/8"	6.65
1 1/8"	.55	4 1/8"	8.70
1 3/8"	.84		



No. 142-S COUPLING (with Stop)
Copper to Copper

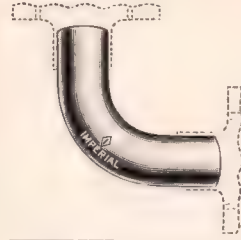
O.D. Tube Size	List Price Each	O.D. Tube Size	List Price Each
1/4"	\$0.08	1 3/8"	\$0.30
3/8"	.09	1 5/8"	.38
1/2"	.09	2 1/8"	.68
5/8"	.12	2 5/8"	1.00
3/4"	.15	3 1/8"	1.65
7/8"	.18	3 5/8"	2.35
1 1/8"	.24	4 1/8"	2.95



No. 144-S TEE
Copper to Copper to Copper
Patent Nos. 2,027,285 - 2,111,695

When ordering tees, specify ends beginning with the left, then right, then the branch.

O.D. Tube Size	List Price Each	O.D. Tube Size	List Price Each
1/4" x 1/4" x 1/4"	\$0.23	1 3/8" x 1 3/8" x 1 3/8"	\$1.15
3/8" x 3/8" x 3/8"	.23	1 5/8" x 1 5/8" x 1 5/8"	1.65
1/2" x 1/2" x 1/2"	.23	2 1/8" x 2 1/8" x 2 1/8"	2.30
5/8" x 5/8" x 5/8"	.27	2 5/8" x 2 5/8" x 2 5/8"	6.25
3/4" x 3/4" x 3/4"	.38	3 1/8" x 3 1/8" x 3 1/8"	6.90
7/8" x 7/8" x 7/8"	.49	3 5/8" x 3 5/8" x 3 5/8"	8.00
1 1/8" x 1 1/8" x 1 1/8"	.76	4 1/8" x 4 1/8" x 4 1/8"	10.65



No. 154-S 90° ELBOW
Fitting to Fitting

O.D. Tube Size	List Price Each	O.D. Tube Size	List Price Each
1/4"	\$0.15	1 3/8"	\$0.84
3/8"	.15	1 5/8"	1.15
1/2"	.15	2 1/8"	1.65
5/8"	.18	2 5/8"	3.05
3/4"	.23	3 1/8"	4.60
7/8"	.30	3 5/8"	6.65
1 1/8"	.55	4 1/8"	8.70



No. 155-S 90° ELBOW
Copper to Copper

O.D. Tube Size	List Price Each	O.D. Tube Size	List Price Each
1/4"	\$0.15	1 3/8"	\$0.84
3/8"	.15	1 5/8"	1.15
1/2"	.15	2 1/8"	1.65
5/8"	.18	2 5/8"	3.05
3/4"	.23	3 1/8"	4.60
7/8"	.30	3 5/8"	6.65
1 1/8"	.55	4 1/8"	8.70



No. 156-S 45° ELBOW
Copper to Copper

O.D. Tube Size	List Price Each	O.D. Tube Size	List Price Each
1/4"	\$0.15	1 3/8"	\$0.84
3/8"	.15	1 5/8"	1.15
1/2"	.15	2 1/8"	1.65
5/8"	.18	2 5/8"	3.05
3/4"	.23	3 1/8"	4.60
7/8"	.30	3 5/8"	6.65
1 1/8"	.55	4 1/8"	8.70



No. 157-S 90° REDUCTION ELBOW
Copper to Copper

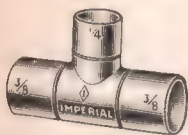
O.D. Tube Size	List Price Each	O.D. Tube Size	List Price Each
3/8" x 1/4"	\$0.15	1 3/8" x 7/8"	\$0.84
1/2" x 3/8"	.15	1 3/8" x 1 1/8"	.84
5/8" x 3/8"	.18	1 5/8" x 1 1/8"	1.15
5/8" x 1/2"	.18	1 5/8" x 1 3/8"	1.15
7/8" x 5/8"	.30	2 1/8" x 1 1/8"	1.65
1 1/8" x 5/8"	.55	2 1/8" x 1 3/8"	1.65
1 1/8" x 7/8"	.55	2 1/8" x 1 5/8"	1.65

For additional sizes, not listed above, and for adapters, reducing adapters and couplings, see pages 20-23.



No. 158-S REDUCTION TEE
(Reduction on Run)
Copper to Copper to Copper
Patent Nos. 2,027,285—2,111,695

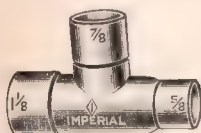
O.D. Tube Size	List Price Each	O.D. Tube Size	List Price Each
1/2" x 3/8" x 1/2"	\$0.25	1 1/8" x 7/8" x 1 1/8"	\$0.84
5/8" x 1/2" x 5/8"	.30	1 3/8" x 1 1/8" x 1 3/8"	1.25
7/8" x 5/8" x 7/8"	.54	1 5/8" x 1 1/8" x 1 5/8"	1.85
1 1/8" x 5/8" x 1 1/8"	.84	2 1/8" x 1 5/8" x 2 1/8"	2.50



No. 159-S REDUCTION TEE
(Reduction on Branch)
Copper to Copper to Copper

Pat. Nos. 2,027,285—2,111,695

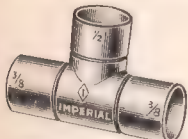
O.D. Tube Size	List Price Each	O.D. Tube Size	List Price Each
3/8" x 3/8" x 1/4"	\$0.25	1 3/8" x 1 3/8" x 1/2"	\$1.25
1/2" x 1/2" x 3/8"	.25	1 3/8" x 1 3/8" x 5/8"	1.25
5/8" x 5/8" x 3/8"	.30	1 3/8" x 1 3/8" x 7/8"	1.25
5/8" x 5/8" x 1/2"	.30	1 3/8" x 1 3/8" x 1 1/8"	1.25
3/4" x 3/4" x 3/8"	.42	1 5/8" x 1 5/8" x 5/8"	1.85
3/4" x 3/4" x 1/2"	.42	1 5/8" x 1 5/8" x 7/8"	1.85
3/4" x 3/4" x 5/8"	.42	1 5/8" x 1 5/8" x 1 1/8"	1.85
7/8" x 7/8" x 1/2"	.54	1 5/8" x 1 5/8" x 1 3/8"	1.85
7/8" x 7/8" x 5/8"	.54	2 1/8" x 2 1/8" x 5/8"	2.50
7/8" x 7/8" x 3/4"	.54	2 1/8" x 2 1/8" x 7/8"	2.50
1 1/8" x 1 1/8" x 1/2"	.84	2 1/8" x 2 1/8" x 1 1/8"	2.50
1 1/8" x 1 1/8" x 5/8"	.84	2 1/8" x 2 1/8" x 1 3/8"	2.50
1 1/8" x 1 1/8" x 3/4"	.84	2 1/8" x 2 1/8" x 1 5/8"	2.50
1 1/8" x 1 1/8" x 7/8"	.84		



No. 160-S REDUCTION TEE
(Different Reductions on Branch and on Run)
Copper to Copper to Copper

Pat. Nos. 2,027,285—2,111,695

O.D. Tube Size	List Price Each	O.D. Tube Size	List Price Each
1 1/8" x 5/8" x 7/8"	\$0.84	1 5/8" x 1 3/8" x 7/8"	\$1.85
1 1/8" x 7/8" x 5/8"	.84	1 5/8" x 1 3/8" x 1 1/8"	1.85
1 3/8" x 7/8" x 5/8"	1.25	2 1/8" x 1 3/8" x 5/8"	2.50
1 3/8" x 1 1/8" x 1/2"	1.25	2 1/8" x 1 3/8" x 7/8"	2.50
1 3/8" x 1 1/8" x 5/8"	1.25	2 1/8" x 1 3/8" x 1 1/8"	2.50
1 3/8" x 1 1/8" x 7/8"	1.25	2 1/8" x 1 5/8" x 5/8"	2.50
1 5/8" x 1 1/8" x 5/8"	1.85	2 1/8" x 1 5/8" x 7/8"	2.50
1 5/8" x 1 1/8" x 7/8"	1.85	2 1/8" x 1 5/8" x 1 1/8"	2.50
1 5/8" x 1 1/8" x 1 3/8"	1.85	2 1/8" x 1 5/8" x 1 3/8"	2.50



No. 184-S REDUCTION TEE
(Reduction on Both Ends of Run)
Copper to Copper to Copper
Patent Nos. 2,027,285—2,111,695

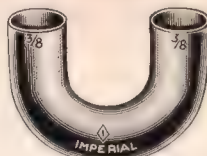
O.D. Tube Size	List Price Each	O.D. Tube Size	List Price Each
3/8" x 3/8" x 1/2"	\$0.25	1/2" x 1/2" x 5/8"	\$0.30
3/8" x 3/8" x 5/8"	.30	5/8" x 5/8" x 7/8"	.54



No. 185-S REDUCTION TEE
(Equal Reduction on Run and on Branch)
Copper to Copper to Copper

Patent Nos. 2,027,285—2,111,695

O.D. Tube Size	List Price Each	O.D. Tube Size	List Price Each
3/8" x 1/4" x 1/4"	\$0.25	1 3/8" x 1 1/8" x 1 1/8"	\$1.25
5/8" x 1/2" x 1/2"	.30	1 5/8" x 1 1/8" x 1 1/8"	1.85
7/8" x 5/8" x 5/8"	.54	1 5/8" x 1 3/8" x 1 3/8"	1.85
1 1/8" x 5/8" x 5/8"	.84	2 1/8" x 1 3/8" x 1 3/8"	2.50
1 1/8" x 7/8" x 7/8"	.84	2 1/8" x 1 5/8" x 1 5/8"	2.50
1 3/8" x 7/8" x 7/8"	1.25		



No. 192-S RETURN BEND
Copper to Copper

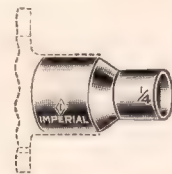
O.D. Tube Size	*Center to Center	List Price Each	O.D. Tube Size	*Center to Center	List Price Each
3/8"	1 1/4"	\$0.24	3/4"	2"	\$0.50
3/8"	1 1/2"	.24	3/4"	2 1/8"	.50
1/2"	1 1/2"	.30	3/4"	2 1/4"	.50
1/2"	1 3/4"	.30	3/4"	2 1/2"	.50
1/2"	2"	.30	3/4"	3 3/8"	.58
1/2"	3"	.35	3/4"	4"	.58
1/2"	4"	.35	3/4"	4 1/8"	.61
5/8"	1 1/8"	.38	7/8"	2 1/2"	.53
5/8"	1 7/8"	.38	7/8"	3 3/8"	.53
5/8"	2"	.38	1 1/8"	3"	.76
5/8"	2 1/4"	.38	1 1/8"	3 1/4"	.76
5/8"	2 1/2"	.45	1 3/8"	3 3/4"	1.20
5/8"	3"	.45	1 3/8"	4"	1.20
5/8"	3 3/8"	.45	1 5/8"	4 1/2"	1.65
5/8"	4 1/8"	.45	2 1/8"	5 1/2"	2.65

* A wide range of centers other than listed available.



No. 204-S WROUGHT UNION
Copper to Copper

O.D. Tube Size	List Price Each	O.D. Tube Size	List Price Each
1/4"	\$.76	1 3/8"	\$2.30
3/8"	.76	1 5/8"	3.35
1/2"	.76	2 1/8"	4.20
5/8"	.91	2 5/8"	8.35
3/4"	1.15	3 1/8"	14.45
7/8"	1.30	3 5/8"	23.40
1 1/8"	1.65	4 1/8"	30.25



No. 239-S BUSHING
Fitting to Copper

O.D. Tube Size	List Price Each	O.D. Tube Size	List Price Each
3/8" x 1/4"	\$0.09	2 5/8" x 1 3/8"	\$1.00
1/2" x 3/8"	.09	2 5/8" x 1 5/8"	1.00
5/8" x 3/8"	.12	2 5/8" x 2 1/8"	1.00
5/8" x 1/2"	.12	3 1/8" x 5/8"	1.65
3/4" x 3/8"	.15	3 1/8" x 7/8"	1.65
3/4" x 1/2"	.15	3 1/8" x 1 1/8"	1.65
3/4" x 5/8"	.15	3 1/8" x 1 3/8"	1.65
7/8" x 1/2"	.18	3 1/8" x 1 5/8"	1.65
7/8" x 5/8"	.18	3 1/8" x 2 1/8"	1.65
1 1/8" x 1/2"	.24	3 1/8" x 2 5/8"	1.65
1 1/8" x 5/8"	.24	3 5/8" x 5/8"	2.35
1 3/8" x 5/8"	.30	3 5/8" x 7/8"	2.35
1 3/8" x 7/8"	.30	3 5/8" x 1 1/8"	2.35
1 3/8" x 1 1/8"	.30	3 5/8" x 1 3/8"	2.35
1 5/8" x 5/8"	.38	3 5/8" x 1 5/8"	2.35
1 5/8" x 7/8"	.38	3 5/8" x 2 1/8"	2.35
1 5/8" x 1 1/8"	.38	3 5/8" x 2 5/8"	2.35
1 5/8" x 1 3/8"	.38	4 1/8" x 5/8"	2.95
2 1/8" x 5/8"	.68	4 1/8" x 7/8"	2.95
2 1/8" x 7/8"	.68	4 1/8" x 1 1/8"	2.95
2 1/8" x 1 1/8"	.68	4 1/8" x 1 3/8"	2.95
2 1/8" x 1 3/8"	.68	4 1/8" x 1 5/8"	2.95
2 5/8" x 5/8"	1.00	4 1/8" x 2 1/8"	2.95
2 5/8" x 7/8"	1.00	4 1/8" x 2 5/8"	2.95
2 5/8" x 1 1/8"	1.00	4 1/8" x 3 1/8"	2.95

For additional sizes, not listed above, and for adapters, reducing adapters and couplings, see pages 20-23.



No. 240-S WROUGHT TUBE CAP

O.D. Tube Size	List Price Each	O.D. Tube Size	List Price Each
3/8"	\$0.09	1 5/8"	\$0.38
1/2"	.09	2 1/8"	.68
5/8"	.12	2 5/8"	1.00
3/4"	.15	3 1/8"	1.65
7/8"	.18	3 5/8"	2.35
1 1/8"	.24	4 1/8"	2.95
1 3/8"	.30		



No. 242-S REDUCTION COUPLING Copper to Copper

O.D. Tube Size	List Price Each	O.D. Tube Size	List Price Each
3/8" x 1/4"	\$0.09	1 3/8" x 5/8"	\$0.30
1/2" x 3/8"	.09	1 3/8" x 7/8"	.30
5/8" x 3/8"	.12	1 3/8" x 1 1/8"	.30
5/8" x 1/2"	.12	1 5/8" x 5/8"	.38
3/4" x 3/8"	.15	1 5/8" x 7/8"	.38
3/4" x 1/2"	.15	1 5/8" x 1 1/8"	.38
3/4" x 5/8"	.15	1 5/8" x 1 3/8"	.38
7/8" x 1/2"	.18	2 1/8" x 5/8"	.68
7/8" x 5/8"	.18	2 1/8" x 7/8"	.68
1 1/8" x 1/2"	.24	2 1/8" x 1 1/8"	.68
1 1/8" x 5/8"	.24	2 1/8" x 1 3/8"	.68
1 1/8" x 7/8"	.24	2 1/8" x 1 5/8"	.68



No. 249-S 90° ELBOW Copper to Male I.P.T.

O.D. Tube Size	Iron Pipe Thread	List Price Each	O.D. Tube Size	Iron Pipe Thread	List Price Each
1/2"	3/8"	\$0.28	5/8"	1/2"	\$0.40
5/8"	3/8"	.40	7/8"	3/4"	.62



No. 250-S 90° ELBOW Copper to Female I.P.T.

O.D. Tube Size	Iron Pipe Thread	List Price Each	O.D. Tube Size	Iron Pipe Thread	List Price Each
1/2"	3/8"	\$0.28	5/8"	1/2"	\$0.40
5/8"	3/8"	.40	7/8"	3/4"	.62

IMPERIAL No. 50 SOLDERING FLUX

For use with 50-50 and 95-5 Solder



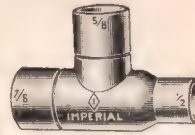
2 oz. can	\$0.23
8 oz. can	.91
1 pound can	1.50
5 pound can	5.70

IMPERIAL SOLDER Imperial No. 50 Solder — 50-50

1 pound spool, 3/32"	\$1.20
1 pound spool, 1/8"	1.20
5 pound spool, 1/8"	6.00

Imperial No. 95 Solder — 95-5

1 pound spool, 3/32"	\$2.00
1 pound spool, 1/8"	2.00



No. 259-S HEAT EXCHANGER TEE Copper to Copper to Copper Patent Nos. 2,027,285—2,111,695

O.D. Tube Size	List Price Each	O.D. Tube Size	List Price Each
7/8" x 5/8" x 1/2"	\$0.54	1 5/8" x 1 1/8" x 1 3/8"	\$1.85

Available in all regular reductions.



No. 210-E COPPER TUBE STRAP

Imperial tubing straps are made of copper and are of the 2-hole type to provide a firm fastening for the tubing. With these straps it is not only possible to turn out a fine looking job, but also one that will stand up under years of service.

O. D. of Tube	List Price Per 100	O. D. of Tube	List Price Per 100
1/4"	\$3.00	7/8"	\$ 6.54
3/8"	3.34	1 1/8"	7.75
1/2"	4.26	1 3/8"	12.01
5/8"	4.71	1 5/8"	13.98
3/4"	5.62	2 1/8"	17.63



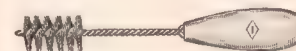
SIZING TOOLS

No. 191-S for Type L Tubing

O.D. Tube Size	List Price Each
1/2"	\$0.60
5/8"	.75
3/4"	.85
7/8"	.90
1 1/8"	1.00
1 3/8"	2.00
1 5/8"	2.55
2 1/8"	3.35

No. 197-S for Type K Tubing

O.D. Tube Size	List Price Each
1/2"	\$0.60
5/8"	.75
3/4"	.85
7/8"	.90
1 1/8"	1.00
1 3/8"	2.00
1 5/8"	2.55
2 1/8"	3.35



No. 89-S WIRE CLEANING BRUSH

Bristles made of nickel silver wire; non-rusting.

O.D. Tube Size	List Price Each	O.D. Tube Size	List Price Each
1/4"	\$0.35	7/8"	\$0.37
3/8"	.35	1 1/8"	.42
1/2"	.35	1 3/8"	.45
5/8"	.35	1 5/8"	.54
3/4"	.37	2 1/8"	.60

IMPERIAL SOLDER BRUSH



No. 90-S—Solder Brush, each	\$0.12
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IMPERIAL SAND CLOTH

No. 129-S—10 yard roll, each	\$1.17
No. 130-S—25 yard, roll, each	2.34
No. 131-S—50 yard roll, each	4.25

For additional sizes, not listed above, and for adapters, reducing adapters and couplings, see pages 20-23.

IMPERIAL SOLDER FITTINGS

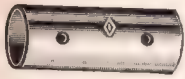
The Imperial Solder Fitting assures an absolutely tight connection, stronger than the tube itself, for electric refrigeration, gas, oil, air and vacuum lines.

This fitting saves time and labor and gives absolute assurance that every connection is both perfect and permanent. No flaring

is necessary and the fitting itself is lighter.

Imperial Solder Fittings, with the exception of the couplings and bushings, are forged. Couplings and bushings are made from drawn seamless copper tube.

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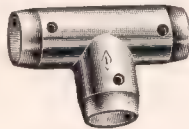


No. 42-S COUPLING
Copper to Copper

O. D. Tube Size	List Price Each	O. D. Tube Size	List Price Each
3/8" x 3/8"	\$0.09	1 1/4" x 1 1/8"	\$0.45
1/4" x 3/8"	.09	1 1/4" x 1"	.45
1/4" x 1/4"	.09	1 1/4" x 3/4"	.45
3/8" x 1/4"	.09	1 1/4" x 5/8"	.45
3/8" x 3/8"	.09	1 3/8" x 7/8"	.45
1/2" x 3/8"	.12	1 3/8" x 3/4"	.45
1/2" x 1/4"	.12	1 3/8" x 5/8"	.45
5/8" x 3/8"	.15	1 3/8" x 1/2"	.45
5/8" x 1/4"	.15	1 1/2" x 1 1/2"	.50
3/4" x 5/8"	.18	1 1/2" x 1 1/4"	.70
3/4" x 1/2"	.18	1 1/2" x 1"	.70
3/4" x 3/8"	.23	1 1/2" x 3/4"	.70
7/8" x 3/4"	.23	1 1/2" x 5/8"	.70
7/8" x 1/2"	.30	1 5/8" x 1"	.70
7/8" x 3/8"	.30	1 5/8" x 1 1/2"	.70
1" x 1"	.30	1 5/8" x 3/4"	.70
1" x 3/4"	.38	1 5/8" x 5/8"	.70
1" x 5/8"	.38	1 5/8" x 1/2"	.70
1" x 1/2"	.38	2" x 2"	.75
1 1/8" x 1"	.40	2" x 1 1/2"	1.00
1 1/8" x 3/4"	.40	2" x 1 1/4"	1.00
1 1/8" x 5/8"	.40	2 1/8" x 1 3/8"	1.00
1 1/8" x 1/2"	.40	2 1/8" x 1 1/8"	1.00
1 1/8" x 3/8"	.40	2 1/8" x 7/8"	1.00
1 1/4" x 1 1/4"	.40	2 5/8" x 2 1/8"	1.00
		2 5/8" x 1 5/8"	1.90

No. 44-S TEE
Copper to Copper to Copper

When ordering tees, specify ends beginning with the left, then right, then the branch.



O. D. Tube Size	List Price Each	Size	List Price Each
3/8" x 3/8" x 3/8"	\$0.23	5/8" x 3/8" x 5/8"	\$0.45
1/4" x 1/4" x 1/4"	.23	5/8" x 3/8" x 1/2"	.45
1/4" x 3/8" x 3/8"	.23	5/8" x 3/8" x 3/8"	.45
1/4" x 3/8" x 1/4"	.23	5/8" x 3/8" x 1/4"	.45
3/8" x 3/8" x 3/8"	.23	5/8" x 3/8" x 5/8"	.45
3/8" x 3/8" x 1/4"	.23	5/8" x 3/8" x 1/2"	.45
3/8" x 3/8" x 3/8"	.23	1/2" x 1/2" x 5/8"	.45
3/8" x 3/8" x 1/4"	.23	1/2" x 1/2" x 3/8"	.45
3/8" x 1/4" x 1/4"	.23	3/4" x 3/4" x 3/8"	.55
3/8" x 1/4" x 3/8"	.23	3/4" x 3/4" x 1/2"	.75
1/4" x 1/4" x 3/8"	.23	3/4" x 3/4" x 3/8"	.75
1/2" x 1/2" x 1/2"	.35	3/4" x 3/4" x 1/4"	.75
1/2" x 1/2" x 3/8"	.35	3/4" x 5/8" x 3/4"	.75
1/2" x 1/2" x 1/4"	.35	3/4" x 5/8" x 5/8"	.75
1/2" x 3/8" x 1/2"	.35	3/4" x 5/8" x 1/2"	.75
1/2" x 3/8" x 3/8"	.35	3/4" x 5/8" x 3/8"	.75
1/2" x 3/8" x 1/4"	.35	3/4" x 1/2" x 1/2"	.75
1/2" x 1/4" x 1/2"	.35	3/4" x 1/2" x 3/8"	.75
1/2" x 1/4" x 3/8"	.35	3/4" x 1/2" x 1/4"	.75
1/2" x 1/4" x 1/2"	.35	3/4" x 3/8" x 3/4"	.75
3/8" x 3/8" x 3/8"	.45	3/4" x 3/8" x 1/2"	.75
3/8" x 3/8" x 1/2"	.45	3/4" x 3/8" x 3/8"	.75
3/8" x 5/8" x 5/8"	.45	3/4" x 3/8" x 1/4"	.75
3/8" x 5/8" x 1/2"	.45	3/4" x 3/8" x 3/8"	.75
3/8" x 5/8" x 3/8"	.45	1/2" x 1/2" x 3/4"	.75
3/8" x 5/8" x 1/4"	.45	7/8" x 7/8" x 7/8"	.70
3/8" x 1/2" x 5/8"	.45	7/8" x 7/8" x 3/4"	1.00
3/8" x 1/2" x 1/2"	.45	7/8" x 7/8" x 5/8"	1.00
3/8" x 1/2" x 3/8"	.45	7/8" x 7/8" x 1/2"	1.00

No. 44-S Tee (Cont'd.)

O.D. Tube Size	List Price Each	O.D. Tube Size	List Price Each
7/8"x 7/8"x 3/8"	\$1.00	1 1/4"x 1/2"x 1/4"	\$2.00
7/8"x 7/8"x 1/8"	1.00	1 "x1 "x1/4"	2.00
7/8"x 7/8"x 1/4"	1.00	3/4"x 3/4"x1/4"	2.00
7/8"x 3/4"x 7/8"	1.00	1 3/8"x1 3/8"x1 3/8"	1.45
7/8"x 3/4"x 3/4"	1.00	1 3/8"x1 3/8"x1 1/8"	2.00
7/8"x 5/8"x 7/8"	1.00	1 3/8"x1 3/8"x 7/8"	2.00
7/8"x 5/8"x 5/8"	1.00	1 3/8"x1 3/8"x 3/4"	2.00
7/8"x 5/8"x 1/2"	1.00	1 3/8"x1 3/8"x 5/8"	2.00
7/8"x 5/8"x 3/8"	1.00	1 3/8"x1 3/8"x 3/8"	2.00
7/8"x 1/2"x 7/8"	1.00	1 3/8"x1 1/8"x1 3/8"	2.00
7/8"x 1/2"x 5/8"	1.00	1 3/8"x1 1/8"x1 1/8"	2.00
7/8"x 1/2"x 1/2"	1.00	1 3/8"x1 1/8"x 7/8"	2.00
7/8"x 3/8"x 7/8"	1.00	1 3/8"x1 1/8"x 3/4"	2.00
5/8"x 5/8"x 7/8"	1.00	1 3/8"x 7/8"x 1 3/8"	2.00
1/2"x 1/2"x 7/8"	1.00	1 3/8"x 7/8"x1 1/8"	2.00
1 "x1 "x1 "	1.60	1 3/8"x 7/8"x1 1/8"	2.00
1 "x1 "x 3/4"	1.60	1 3/8"x 5/8"x1 3/8"	2.00
1 "x1 "x 5/8"	1.60	1 1/8"x1 1/8"x1 3/8"	2.00
1 "x1 "x 1/2"	1.60	7/8"x 7/8"x1 3/8"	2.00
1 "x1 "x 3/8"	1.60	1 1/2"x1 1/2"x1 1/2"	2.30
1 "x1 "x 1/4"	1.60	1 1/2"x1 1/2"x1 1/4"	2.60
1 "x 3/4"x1 "	1.60	1 1/2"x1 1/2"x1 "	2.60
1 "x 3/4"x 3/4"	1.60	1 1/2"x1 1/2"x 3/4"	2.60
1 "x 3/4"x 5/8"	1.60	1 1/2"x1 1/2"x 5/8"	2.60
1 "x 3/4"x 1/2"	1.60	1 1/2"x1 1/2"x 1/2"	2.60
1 "x 5/8"x1 "	1.60	1 1/2"x1 1/4"x1 1/2"	2.60
1 "x 5/8"x 3/4"	1.60	1 1/2"x1 1/4"x1 1/4"	2.60
1 "x 5/8"x 5/8"	1.60	1 1/2"x1 1/4"x1 "	2.60
1 "x 1/2"x1 "	1.60	1 1/2"x1 1/4"x 3/4"	2.60
1 "x 1/2"x 1/2"	1.60	1 1/2"x1 "x1 1/2"	2.60
1 "x 3/8"x1 "	1.60	1 1/2"x1 "x1 1/4"	2.60
3/4"x 3/4"x1 "	1.60	1 1/2"x1 "x1 "	2.60
5/8"x 5/8"x1 "	1.60	1 1/2"x1 "x 3/4"	2.60
1 1/8"x1 1/8"x1 1/8"	1.10	1 1/2"x 3/4"x1 1/4"	2.60
1 1/8"x1 1/8"x1 "	1.60	1 1/2"x 3/4"x1 "	2.60
1 1/8"x1 1/8"x 7/8"	1.60	1 1/2"x 3/4"x 3/4"	2.60
1 1/8"x1 1/8"x 3/4"	1.60	1 1/2"x 5/8"x1 1/2"	2.60
1 1/8"x1 1/8"x 5/8"	1.60	1 1/4"x1 1/4"x1 1/2"	2.60
1 1/8"x1 1/8"x 1/2"	1.60	1 1/4"x 5/8"x1 1/2"	2.60
1 1/8"x1 1/8"x 3/8"	1.60	1 "x1 "x1 1/2"	2.60
1 1/8"x1 1/8"x 1/4"	1.60	1 5/8"x1 5/8"x1 5/8"	2.15
1 1/8"x 7/8"x1 1/8"	1.60	1 5/8"x1 5/8"x1 3/8"	2.60
1 1/8"x 7/8"x 7/8"	1.60	1 5/8"x1 5/8"x1 1/8"	2.60
1 1/8"x 7/8"x 3/4"	1.60	1 5/8"x1 5/8"x 7/8"	2.60
1 1/8"x 7/8"x 5/8"	1.60	1 5/8"x1 5/8"x 5/8"	2.60
1 1/8"x 7/8"x 1/2"	1.60	1 5/8"x1 3/8"x1 5/8"	2.60
1 1/8"x 3/4"x1 1/8"	1.60	1 5/8"x1 3/8"x1 3/8"	2.60
1 1/8"x 3/4"x 3/4"	1.60	1 5/8"x1 3/8"x 1/8"	2.60
1 1/8"x 5/8"x1 1/8"	1.60	1 5/8"x1 3/8"x 7/8"	2.60
1 1/8"x 5/8"x 7/8"	1.60	1 5/8"x1 5/8"x 3/4"	2.60
1 1/8"x 5/8"x 5/8"	1.60	1 5/8"x1 5/8"x1 5/8"	2.60
1 1/8"x 5/8"x 1/2"	1.60	1 5/8"x1 1/8"x1 3/8"	2.60
1 1/8"x 3/4"x1 1/8"	1.60	1 5/8"x1 7/8"x1 5/8"	2.60
1 1/8"x 3/4"x 3/4"	1.60	1 5/8"x 7/8"x 7/8"	2.60
1 1/8"x 5/8"x1 1/8"	1.60	1 5/8"x 7/8"x1 3/8"	2.60
1 1/4"x 1/4"x1 1/4"	1.60	1 5/8"x 7/8"x 7/8"	2.60
1 1/4"x1 1/4"x1 "	2.00	1 5/8"x 3/4"x1 5/8"	2.60
1 1/4"x1 1/4"x 3/4"	2.00	1 5/8"x 5/8"x1 5/8"	2.60
1 1/4"x1 1/4"x 5/8"	2.00	1 3/8"x1 3/8"x1 3/8"	2.60
1 1/4"x1 1/4"x 1/2"	2.00	1 1/8"x1 1/8"x1 5/8"	2.60
1 1/4"x1 1/4"x 3/8"	2.00	1 "x1 "x1 5/8"	2.60
1 1/4"x1 1/4"x 1/4"	2.00	2 "x2 "x2 "	3.75
1 1/4"x1 "x1 1/4"	2.00	2 "x2 "x1 1/2"	4.20
1 1/4"x1 "x1 "	2.00	2 "x2 "x1 1/4"	4.20
1 1/4"x1 "x 3/4"	2.00	2 "x2 "x1 "	4.20
1 1/4"x1 "x 5/8"	2.00	2 "x2 "x 3/4"	4.20
1 1/4"x1 "x 1/2"	2.00	2 "x2 "x 5/8"	4.20
1 1/4"x 3/4"x1 1/4"	2.00	2 "x1 1/2"x2 "	4.20
1 1/4"x 3/4"x1 "	2.00	2 "x1 1/2"x1 1/2"	4.20
1 1/4"x 3/4"x 3/4"	2.00	2 "x1 1/2"x1 1/4"	4.20
1 1/4"x 5/8"x1 1/4"	2.00	2 "x1 1/2"x1 "	4.20

No. 44-S TEE (Cont'd)

O.D. Tube Size	List Price Each	O.D. Tube Size	List Price Each
2 "x1 1/2" x 3/4" *	\$4.20	2 1/8 "x1 5/8" x1 1/8" *	\$4.20
2 "x1 1/4" x2 " *	4.20	2 1/8 "x1 5/8" x 7/8" *	4.20
2 "x1 1/4" x1 1/2" *	4.20	2 1/8 "x1 3/8" x2 1/8" *	4.20
2 "x1 1/4" x1 1/4" *	4.20	2 1/8 "x1 3/8" x1 5/8" *	4.20
2 "x1 1/4" x1 " *	4.20	2 1/8 "x1 3/8" x1 3/8" *	4.20
2 "x1 " x2 " *	4.20	2 1/8 "x1 3/8" x1 1/8" *	4.20
2 "x1 " x1 1/2" *	4.20	2 1/8 "x1 1/8" x2 1/8" *	4.20
2 "x1 " x1 1/4" *	4.20	2 1/8 "x1 1/8" x1 5/8" *	4.20
2 "x 3/4" x2 " *	4.20	2 1/8 "x1 1/8" x1 3/8" *	4.20
1 1/2 "x1 1/2" x2 " *	4.20	2 1/8 "x1 1/8" x1 1/8" *	4.20
1 1/4 "x1 1/4" x2 " *	4.20	2 1/8 "x 7/8" x2 1/8" *	4.20
1 "x1 " x2 " *	4.20	2 1/8 "x 5/8" x2 1/8" *	4.20
3/4 "x 3/4" x2 " *	4.20	1 5/8 "x1 5/8" x2 1/8" *	4.20
2 1/8 "x2 1/8" x2 1/8" *	3.40	1 3/8 "x1 3/8" x2 1/8" *	4.20
2 1/8 "x2 1/8" x1 5/8" *	4.20	2 5/8 "x2 5/8" x2 5/8" *	6.35
2 1/8 "x2 1/8" x1 3/8" *	4.20	2 5/8 "x2 5/8" x2 1/8" *	7.10
2 1/8 "x2 1/8" x1 1/8" *	4.20	2 5/8 "x2 5/8" x1 5/8" *	7.10
2 1/8 "x2 1/8" x 7/8" *	4.20	2 5/8 "x2 5/8" x1 1/8" *	7.10
2 1/8 "x2 1/8" x 3/4" *	4.20	2 5/8 "x2 1/8" x2 5/8" *	7.10
2 1/8 "x2 1/8" x 5/8" *	4.20	2 5/8 "x2 1/8" x2 1/8" *	7.10
2 1/8 "x1 5/8" x2 1/8" *	4.20	2 5/8 "x2 1/8" x1 5/8" *	7.10
2 1/8 "x1 5/8" x1 5/8" *	4.20	2 1/8 "x2 1/8" x2 5/8" *	7.10

NO. 46-S COUPLING Copper to Inside I.P.S. Thread



Size O.D. Tube I.P.T.	List Price Each	Size O.D. Tube I.P.T.	List Price Each
1/4 "x 1/2" *	\$0.30	7/8 "x 1/2" *	\$0.60
1/4 "x 3/8" *	.27	1 "x1 " *	.90
1/4 "x 1/4" *	.23	1 1/8 "x1 " *	.90
1/4 "x 1/8" *	.12	1 1/8 "x 3/4" *	.90
1/2 "x 1/4" *	.23	1 1/4 "x1 1/4" *	1.25
1/2 "x 1/8" *	.23	1 3/8 "x1 1/4" *	1.25
3/8 "x 3/8" *	.27	1 1/2 "x1 1/2" *	1.80
3/8 "x 1/4" *	.23	1 5/8 "x1 1/2" *	1.80
3/8 "x 1/8" *	.23	2 "x2 " *	2.65
1/2 "x 1/2" *	.30	2 1/8 "x2 " *	2.65
1/2 "x 3/8" *	.27		
1/2 "x 1/4" *	.27		
5/8 "x 3/4" *	.60		
5/8 "x 1/2" *	.30		
5/8 "x 3/8" *	.30		
3/4 "x 3/4" *	.60		
3/4 "x 1/2" *	.60		
7/8 "x 3/4" *	.60		

Copper to Inside I.P.T. Couplings Left Hand Thread

1 1/8 "x 1/8" *	\$0.15
1/4 "x 1/8" *	.15
3/8 "x 1/8" *	.27



NO. 48-S COUPLING Copper to Outside I. P. S. Thread

Size O.D. Tube I.P.T.	List Price Each	Size O.D. Tube I.P.T.	List Price Each
1/8 "x 1/8" *	\$0.11	3/4 "x 1/2" *	\$0.33
1/8 "x 1/8" *	.11	7/8 "x1 " *	.60
1/4 "x 3/8" *	.24	7/8 "x 3/4" *	.38
1/4 "x 1/4" *	.23	7/8 "x 1/2" *	.38
1/4 "x 1/8" *	.11	1 "x1 1/2" *	1.50
1/2 "x 3/8" *	.24	1 "x1 1/4" *	1.25
1/2 "x 1/4" *	.23	1 "x1 " *	.60
1/2 "x 1/8" *	.23	1 "x 3/4" *	.60
3/8 "x 1/2" *	.27	1 1/8 "x1 1/2" *	1.50
3/8 "x 3/8" *	.24	1 1/8 "x1 1/4" *	1.25
3/8 "x 1/4" *	.23	1 1/8 "x1 " *	.60
3/8 "x 1/8" *	.23	1 1/8 "x 3/4" *	.60
1/2 "x 3/4" *	.40	1 1/4 "x1 1/2" *	1.50
1/2 "x 1/2" *	.27	1 1/4 "x1 1/4" *	1.00
1/2 "x 3/8" *	.24	1 1/4 "x1 " *	1.00
1/2 "x 1/4" *	.25	1 3/8 "x1 1/2" *	1.50
5/8 "x1 " *	.60	1 3/8 "x1 1/4" *	1.00
5/8 "x 3/4" *	.38	1 3/8 "x1 " *	1.00
5/8 "x 1/2" *	.27	1 3/8 "x 3/4" *	1.00
5/8 "x 3/8" *	.27	1 1/2 "x1 1/2" *	1.50
3/4 "x1 " *	.60	1 1/2 "x1 1/4" *	1.50
3/4 "x 3/4" *	.33	1 5/8 "x2 " *	2.25

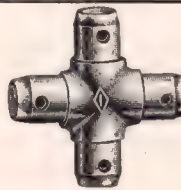
No. 48-S COUPLINGS— (Continued)

Size O.D. Tube I.P.T.	List Price Each	Size O.D. Tube I.P.T.	List Price Each
1 5/8 "x1 1/2" *	\$1.15	2 1/8 "x2 " *	\$1.65
1 5/8 "x1 1/4" *	1.50	2 1/8 "x1 1/2" *	1.90
1 5/8 "x1 " *	1.50	2 1/8 "x1 1/4" *	1.90
2 "x2 " *	1.90	2 5/8 "x2 1/2" *	3.40
2 "x1 1/2" *	1.90	2 5/8 "x2 " *	3.40
2 1/8 "x2 1/2" *	4.50	2 5/8 "x1 1/2" *	3.40

No. 49-S 90° ELBOW—FORGED Copper to Outside I. P. S. Thread



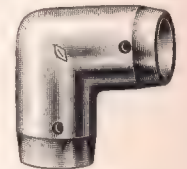
Size O.D. Tube I.P.T.	List Price Each	Size O.D. Tube I.P.T.	List Price Each
1/8 "x 1/8" *	\$0.18	1 "x 3/8" *	\$1.10
1/4 "x 1/2" *	.30	1 1/8 "x1 " *	.90
1/4 "x 3/8" *	.30	1 1/8 "x 3/4" *	1.10
1/4 "x 1/4" *	.25	1 1/8 "x 1/2" *	1.10
1/4 "x 1/8" *	.18	1 1/4 "x1 1/4" *	1.20
1/2 "x 1/2" *	.30	1 1/4 "x1 " *	1.20
1/2 "x 3/8" *	.30	1 1/4 "x 3/4" *	1.20
1/2 "x 1/4" *	.30	1 3/8 "x1 1/4" *	1.10
5/8 "x 3/4" *	.50	1 3/8 "x1 " *	1.20
5/8 "x 1/2" *	.30	1 3/8 "x 3/4" *	1.20
5/8 "x 3/8" *	.30	1 3/8 "x 1/2" *	1.20
3/4 "x1 " *	.90	1 1/2 "x1 1/2" *	1.65
3/4 "x 3/4" *	.50	1 1/2 "x1 1/4" *	1.65
3/4 "x 1/2" *	.65	1 1/2 "x1 " *	1.65
7/8 "x1 " *	.90	1 5/8 "x1 1/2" *	1.40
7/8 "x 3/4" *	.50	1 5/8 "x1 1/4" *	1.65
7/8 "x 1/2" *	.65	1 5/8 "x1 " *	1.65
7/8 "x 3/8" *	.65	2 "x2 " *	2.70
1 "x1 " *	1.10	2 "x1 1/2" *	2.70
1 "x 3/4" *	1.10	2 "x1 1/4" *	2.70
1 "x 1/2" *	1.10	2 1/8 "x2 " *	2.50
		2 1/8 "x1 1/2" *	2.70
		2 1/8 "x1 1/4" *	2.70



No. 52-S CROSS—FORGED

O.D. Tube Size	List Price Each
1/4 "x 1/4" x 1/4 "x 1/4" *	\$0.45
3/8 "x 3/8" x 3/8 "x 3/8" *	.60
1/2 "x 1/2" x 1/2 "x 1/2" *	.70
5/8 "x 5/8" x 5/8 "x 5/8" *	.80

No. 55-S 90° ELBOW—FORGED Copper to Copper



O.D. Tube Size	List Price Each	O.D. Tube Size	List Price Each
1/4 "x 1/4" *	\$0.15	1 1/8 "x1 1/8" *	\$0.75
1/2 "x 1/2" *	.25	1 1/8 "x1 " *	.90
3/8 "x 3/8" *	.25	1 1/8 "x 7/8" *	.90
3/8 "x 1/2" *	.15	1 1/8 "x 3/4" *	.90
3/8 "x 3/4" *	.15	1 1/8 "x 5/8" *	.90
1/2 "x 1/2" *	.15	1 1/8 "x 1/2" *	.90
1/2 "x 3/8" *	.25	1 1/8 "x 3/8" *	.90
1/2 "x 1/4" *	.18	1 1/8 "x 1/4" *	.90
5/8 "x 5/8" *	.18	1 1/4 "x1 1/4" *	1.10
5/8 "x 1/2" *	.18	1 1/4 "x1 " *	1.10
5/8 "x 3/8" *	.18	1 1/4 "x 3/4" *	1.10
3/4 "x 3/4" *	.45	1 1/4 "x 1/2" *	1.10
3/4 "x 1/2" *	.45	1 1/4 "x 3/8" *	1.10
3/4 "x 3/8" *	.45	1 1/4 "x 1/4" *	1.10
7/8 "x 7/8" *	.30	1 3/8 "x1 3/8" *	1.00
7/8 "x 3/4" *	.60	1 3/8 "x1 1/2" *	1.10
7/8 "x 5/8" *	.60	1 3/8 "x 7/8" *	1.10
7/8 "x 1/2" *	.60	1 3/8 "x 3/4" *	1.10
1 "x1 " *	.90	1 3/8 "x 1/2" *	1.10
1 "x 3/4" *	.90	1 1/2 "x1 1/2" *	1.50
1 "x 5/8" *	.90	1 1/2 "x1 1/4" *	1.50
1 "x 1/2" *	.90		

* These odd size couplings are only manufactured and stocked in small quantities. If we are out of stock we will require about one week to ten days to furnish.

Many sizes not shown above may be found under IMPERIAL WROUGHT COPPER FITTINGS, pages 17-19.

No. 55-S ELBOW (Cont'd)

O.D. Tube Size	List Price Each	O.D. Tube Size	List Price Each
1 1/2"x1"	\$1.50	2"x1 1/2" *	\$2.30
1 1/2"x 3/4" *	1.50	2"x1 1/4" *	2.30
1 1/2"x 5/8" *	1.50	2"x1" *	2.30
1 3/8"x1 1/8"	1.40	2 1/8"x2 1/8"	2.10
1 3/8"x1 1/2"	1.50	2 1/8"x1 5/8"	2.30
1 3/8"x1 3/8"	1.50	2 1/8"x1 3/8"	2.30
1 3/8"x1 1/8"	1.50	2 1/8"x1 1/8"	2.30
1 5/8"x 7/8"	1.50	2 1/8"x 3/4" *	2.30
1 5/8"x 5/8"	1.50	2 5/8"x2 5/8"	4.50
1 5/8"x 3/8"	1.50	2 5/8"x2 1/8"	5.00
2"x2"	2.30		

No. 56-S 45° ELBOW—FORGED

Copper to Copper



O.D. Tube Size	List Price Each	O.D. Tube Size	List Price Each
1/2"x 1/2" *	\$0.55	1 3/8"x1 3/8"	\$1.00
5/8"x 5/8" *	.45	1 1/2"x1 1/2" *	1.50
3/4"x 3/4"	.45	1 5/8"x1 5/8"	1.40
7/8"x 7/8" *	.50	2"x2"	2.30
1"x1"	.90	2 1/8"x2 1/8"	2.10
1 1/8"x1 1/8"	.75	2 5/8"x2 5/8" *	4.50
1 1/4"x1 1/4" *	1.10		



No. 70-S 90° ELBOW—FORGED

Copper to Inside I.P.S.
Right Hand Thread

Size O.D. Tube I.P.T.	List Price Each	Size O.D. Tube I.P.T.	List Price Each
1/4"x 1/4" *	\$0.25	1"x 3/4"	\$1.10
1/4"x 1/8"	.25	1"x 1/2"	1.10
3/8"x 3/8" *	.30	1 1/8"x1"	.90
3/8"x 1/4" *	.25	1 1/8"x 3/4"	1.10
3/8"x 1/8"	.25	1 1/4"x1 1/4" *	1.20
1/2"x 1/2" *	.45	1 1/4"x1"	1.20
1/2"x 3/8"	.30	1 3/8"x1 1/4" *	1.10
5/8"x 3/4"	.65	1 3/8"x1"	1.20
5/8"x 1/2"	.45	1 1/2"x1 1/2" *	2.10
5/8"x 3/8"	.45	1 1/2"x1 1/4" *	2.10
3/4"x 3/4"	.65	1 5/8"x1 1/2" *	2.10
3/4"x 1/2"	.65	1 5/8"x1 1/4" *	2.10
7/8"x 3/4"	.65	2"x1 1/2" *	2.70
7/8"x 1/2"	.65	2 1/8"x1 1/2" *	2.70
1"x1"	1.10		



No. 95-S TEE—FORGED

Copper to Copper to Inside I.P.S.

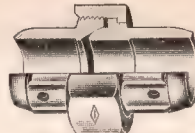
O.D. Tube Size I.P.T.	List Price Each	O.D. Tube Size I.P.T.	List Price Each
1/4"x 1/4"x 1/4"	\$0.55	3/4"x 3/4"x 1/2" *	\$1.10
1/4"x 1/4"x 1/8" *	.55	3/4"x 3/4"x 3/8" *	1.10
3/8"x 3/8"x 3/8" *	.70	7/8"x 7/8"x 3/4"	1.30
3/8"x 3/8"x 1/4"	.55	7/8"x 7/8"x 1/2"	1.10
3/8"x 3/8"x 1/8"	.55	1 1/8"x1 1/8"x1"	1.70
1/2"x 1/2"x 1/2" *	.80	1 1/8"x1 1/8"x 3/4"	1.60
1/2"x 1/2"x 3/8" *	.70	1 3/8"x1 3/8"x1 1/4" *	2.10
1/2"x 1/2"x 1/4" *	.70	1 3/8"x1 3/8"x1"	1.70
5/8"x 5/8"x 1/2" *	.80	1 5/8"x1 5/8"x1 1/2" *	4.50
5/8"x 5/8"x 3/8"	.70	2 1/8"x2 1/8"x 1/2" *	4.50
3/4"x 3/4"x 3/4" *	1.30		

No. 45-S TEE—FORGED

Copper to Copper to Outside I.P.S.



O.D. Tube Size I.P.T.	List Price Each	O.D. Tube Size I.P.T.	List Price Each
1/4"x 1/4"x 1/8"	\$0.55	1/2"x 1/2"x 1/4" *	\$0.80
3/8"x 3/8"x 1/4" *	.70		



No. 104-S GROUND JOINT UNION—FORGED

Copper to Copper

O.D. Tube Size	List Price Each	O.D. Tube Size	List Price Each
3/8"x 3/8"	\$1.10	1 1/8"x1 1/8"	\$3.10
1/2"x 1/2"	1.20	1 5/8"x1 5/8"	5.60
3/4"x 3/4"	2.40	1 1/8"x1" Outside Pipe Thread . . .	3.10
7/8"x 7/8"	2.40		

No. 105-S FLANGED UNION—FORGED

Copper to Copper



O.D. Tube Size	Bolt Hole Centers	No. of Bolts	List Price Each
5/8"	1 5/8"	2	\$3.40
3/4"	1 5/8"	2	3.40
7/8"	2 3/4"	2	6.00
1 1/8"	2 3/4"	2	6.00
1 3/8"	2 3/4"	2	6.00
1 1/8"	2 1/2"	4	10.20
1 3/8"	2 1/2"	4	10.20
1 5/8"	2 1/2"	4	10.20
2 1/8"	2 1/2"	4	11.00

No. 138-S COUPLING — Copper to Flare



O.D. Tube	O.D. Flare	List Price Each	Size O.D. Tube O.D. Flare	List Price Each
1/4"x 1/4"		\$0.20	1/2"x 1/2"	\$0.30
5/8"x 3/8"		.25	1/2"x 3/8"	.30
5/8"x 1/2"		.25	5/8"x 5/8"	.45
5/8"x 1/4"		.25	5/8"x 1/2"	.45
3/8"x 5/8" *		.45	5/8"x 3/8" *	.45
3/8"x 1/2" *		.30	3/4"x 3/4" *	.60
3/8"x 3/8"		.25	3/8"x 5/8"	.45
3/8"x 1/4" *		.25	3/4"x 1/2" *	.45
1/2"x 3/4" *		.60	7/8"x 5/8"	.60
1/2"x 5/8" *		.45		



No. 139-S BUSHING

Fitting to Copper

O.D. Tube Size	List Price Each	O.D. Tube Size	List Price Each
1/2"x 1/4"	\$0.12	1 3/8"x 7/8"	\$0.45
5/8"x 1/4"	.15	1 3/8"x 3/4" *	.45
3/4"x 5/8"	.13	1 3/8"x 5/8"	.45
3/4"x 1/2"	.13	1 5/8"x1 1/2" *	.70
3/4"x 3/8" *	.20	1 5/8"x1 1/4" *	.70
3/4"x 1/4" *	.20	1 5/8"x1 1/8"	.70
7/8"x 3/4"	.15	1 5/8"x 7/8"	.70
7/8"x 1/2"	.25	2"x1 1/2"	.80
1 1/8"x1"	.30	2 1/8"x1 3/8"	1.10
1 1/8"x 3/4"	.40	2 1/8"x1 1/8"	1.10
1 1/8"x 5/8"	.40	2 1/8"x 7/8" *	1.10
1 3/8"x1 1/4" *	.45	2 5/8"x1 3/8" *	1.90

No. 639-S PLUG

O. D. Tube	List Price Each	O. D. Tube	List Price Each
1/4"	\$0.08	1 1/8"	\$0.24
3/8"	.09	1 1/4"	.76
1/2"	.09	1 3/8"	.76
5/8"	.12	1 1/2"	1.05
3/4"	.15	1 5/8"	1.05
7/8"	.18	2"	1.50
1"	.24	2 1/8" *	1.50



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Many sizes not shown above may be found under IMPERIAL WROUGHT COPPER FITTINGS, pages 17-19.

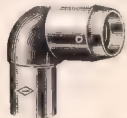
No. 640-S CAP



O. D. Tube	List Price Each	O. D. Tube	List Price Each
1/4"	\$0.08	1 1/8"	\$0.24
3/8"	.09	1 1/4"*	.76
1/2"	.09	1 3/8"*	.76
5/8"	.12	1 1/2"	1.05
3/4"	.15	1 5/8"	1.05
7/8"	.18	2"	1.50
1"	.24	2 1/8"*	1.50

No. 661-S COUPLING Copper to Female SAE Thread

O.D. Tube	Female Flare	List Price Each	O.D. Tube	Female Flare	List Price Each
1/4"	3/8"	\$0.30	1/2"	1/2"	\$0.40
1/4"	1/4"	.30	5/8"	3/4"	.90
3/8"	3/8"	.30	5/8"	5/8"	.55
3/8"	1/2"	.40	3/4"	3/4"	.90
1/2"	5/8"	.55	7/8"	3/4"	.90

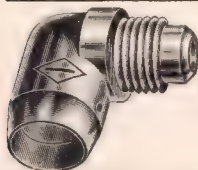


No. 216-S 90° STREET ELBOW—FORGED Fitting to Copper

Fitting Size	O.D. Tube Size	List Price Each	Fitting Size	O.D. Tube Size	List Price Each
3/8"	3/8"	\$0.25	1 1/8"	1 1/8"	\$0.75
1/2"	1/2"	.30	1 3/8"	1 3/8"	1.00
5/8"	5/8"	.30	1 1/2"	1 1/2"	1.40
3/4"	3/4"	.45	2 1/8"	2 1/8"	2.10
7/8"	7/8"	.50			

No. 224-S 45° STREET ELBOW—FORGED Fitting to Copper

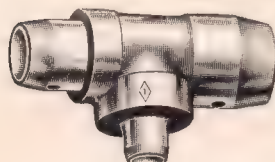
Fitting Size	O.D. Tube Size	List Price Each	Fitting Size	O.D. Tube Size	List Price Each
5/8"	5/8"	\$0.45	1 1/8"	1 1/8"	\$0.75
7/8"	7/8"	.50	1 1/2"	1 1/2"	1.40



No. 149-S ELBOW—FORGED Copper to Flare

O. D. Tube	O. D. Flare	List Price Each	O. D. Tube	O. D. Flare	List Price Each
1/4"	1/4"	\$0.30	1/2"	3/8"	\$0.45
3/8"	3/8"	.35	5/8"	5/8"	.55
1/2"	1/2"	.40			

HEAT INTERCHANGER TEE



No. 59-S

These tees are used for making up counter flow water condensers or for suction line heat interchangers.

They permit a smaller sized tube to be used inside of a larger sized tube. Furnished in a variety of sizes as tabulated below—all for solder connections.

O.D. Tube Size	List Price Each	O.D. Tube Size	List Price Each
5/8" x 3/8" x 1/4"	\$0.80	1 3/8" x 1 1/8" x 1/2"	\$2.40
3/4" x 1/2" x 1/2"	1.00	1 5/8" x 1 3/8" x 5/8"	3.40
3/4" x 1/2" x 3/8"	1.00	1 5/8" x 1 1/8" x 1 3/8"	3.40
3/4" x 1/2" x 1/4"	1.00	2 1/8" x 1 5/8" x 7/8"	5.20
7/8" x 5/8" x 1/2"	1.10	2 1/8" x 1 5/8" x 3/4"	5.20
7/8" x 5/8" x 3/8"	1.10	2 1/8" x 1 5/8" x 5/8"	5.20
1 1/8" x 7/8" x 3/8"	2.10	2 1/8" x 7/8" x 2 1/8"	5.20
1 1/8" x 3/4" x 3/8"	2.10		

Various combinations can be secured on application.

* These odd size couplings are only manufactured and stocked in small quantities. If we are out of stock we will require about one week to ten days to furnish.

Many sizes not shown above may be found under IMPERIAL WROUGHT COPPER FITTINGS, pages 17-19.

IMPERIAL HI-DUTY DEHYDRATED COPPER TUBING



This is a real Hi-Duty tubing, manufactured expressly for refrigeration and air-conditioning work. Its physical properties make it particularly resistant to corrosion by liquid refrigerants.

It is accurate to size and gauge, with .035" wall (No. 20 Stubs Gauge). Interior of tubing is clean and dry, and both ends are sealed tight to guard against entrance of moisture or dirt. Electrically annealed to assure uniform temper.

Furnished in 25, 50 and 100-ft. coils in sizes of 3/8", 1/4", 1/2", 5/8" and 3/4" outside diameter. Can also be furnished in either plain or tin plated finish.

Each coil is wrapped and bears a tag showing the outside diameter, length of coil and whether plain or tin plated.

Prices will be furnished upon application.



IMPERIAL ALL-METAL SOLDER AND FLUX

A specially developed high tensile strength solder and all-metal flux which will solder such difficult-to-solder metals as aluminum, stainless steel, cast iron, zinc base die castings, monel, etc., as well as other metals.

Needed in every shop doing refrigeration and air conditioning service work for such difficult jobs as repair of stainless steel evaporators and other evaporators; joining tubing to evaporators; repairing compressor tubing connections; repairing ice trays, etc. Solder can be used for joining aluminum and stainless steel, aluminum and copper and similar applications.

While solder is applied at temperatures comparable to ordinary soft solder, it forms a bond with a tensile strength many times as great.

Solder is designed for use in connection with the all-metal flux which is furnished in conjunction with it, the flux being used to dissipate the oxides on the surface of the metal preparatory to application of solder. Blow torch, welding torch or large soldering iron can be used for applying the solder. Solder melts at approximately 500° Fahr.

This solder fills the gap between hard and soft solders and frequently can be substituted with excellent results for the hard type with substantial savings. Also lower application temperature reduces hazards to copper tubing and other equipment.

No. 333-H Special Kit (contains 5 sticks solder, flux, emery cloth, directions). Price\$1.75

No. 334-H All-Purpose Kit (contains 12 sticks solder, flux, emery cloth, directions). Price 3.50

No. 335-H Economy Kit (contains 20 sticks solder, flux, emery cloth, directions). Price 5.00

No. 336-H Imperial All-Metal Solder, per lb. Price 2.00

No. 337-H Imperial All-Metal flux—

Prices, 1/4 lb. bottle \$1.50; 1/2 lb. \$2.50

IMPERIAL REFRIGERATION SERVICE TOOLS

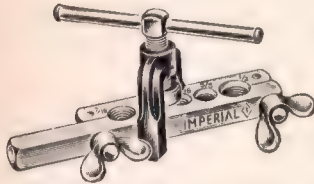
Imperial too's are widely and successfully used by engineers, installation and service men engaged in all types of refrigeration and air conditioning work. They are better tools which consistently deliver trouble-free work and provide enduring service.

The Imperial line of tools is kept up to the minute by constant research and development work.

The line includes tube working tools; equipment for charging, purging and testing; wheel puller; soldering and brazing equipment; Halide leak detectors and allied items.

§ IMPERIAL FLARING TOOL WITH SLIP-ON YOKE

Pat. Nos. 1,724,697, 1,661,367, 2,072,359
Other Patents Pending



The new Imperial Flaring Tool provides ease and speed of operation never before attained in a flaring tool.

The yoke is made so that it can be slipped on over the bar without twisting or turning. The inside edges of the yoke are slotted so that once in position a slight turn holds it in place on the bar.

An additional advantage of this tool is the construction of the bottom of the yoke, which permits flares to be made where there is little space between nut and the end of tubing. Fin tubing sometimes offers this problem.

Flares soft copper, brass or aluminum tubing. Yokes are made of forged steel.

No. 193-F Imperial Flaring Tool, flares $\frac{3}{8}$ ", $\frac{1}{4}$ ", $\frac{1}{8}$ ", $\frac{3}{16}$ " and $\frac{1}{2}$ " O.D. tubing. Price each **\$3.25**

No. 195-F Imperial Flaring Tool, flares $\frac{1}{4}$ ", $\frac{1}{8}$ ", $\frac{3}{16}$ ", $\frac{1}{2}$ " and $\frac{5}{8}$ " O.D. tubing. Price each **4.25**

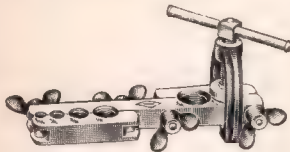
No. 36273 Yokes only for 193-F and 195-F. Price each **1.40**

No. 36277 Bar only for 193-F. Price each **2.00**

No. 36279 Bar only for 195-F. Price each **3.00**

IMPERIAL FLARING TOOL (Wide Range Type.)

Pat. Nos. 1,724,697, 1,661,367, 2,072,359



This tool makes it easy to flare large diameter and hard tubing without cracking or splitting the tubing.

With it proper flares can be made to prevent leakage when making up joints with S.A.E. flared fittings. Yoke is self-centering and spreader cone is on a swivel and remains stationary when flaring.

Flares copper, brass or aluminum tubing. For $\frac{3}{8}$ ", $\frac{1}{4}$ ", $\frac{3}{16}$ ", $\frac{1}{2}$ ", $\frac{5}{8}$ " and $\frac{3}{4}$ " O.D. tubing.

No. 175-F Imperial Flaring Tool. Each **\$4.85**

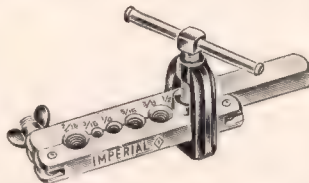
No. 32638 Yoke only for 175-F. Each **1.95**

No. 32641 Bar only for 175-F. Each **3.25**

IMPERIAL FLARING TOOL

Pat. Nos. 1,724,697, 1,661, 367
2,072,359

Flares copper or brass tubing to make S.A.E. joints without cracking or splitting tubing. Perfect flares prevent leakage and can be made in less than thirty seconds. Yokes for Nos. 93-F and 95-F are made of steel forging.



Nos. 93-F and 95-F furnished either with cone which rotates with the screw or with swivel cone. The latter remains stationary while screw is turned. Order this type by No. 93-FS or No. 95-FS. Add \$0.25 to the price of 93-F or 95-F.

No. 93-F for $\frac{3}{8}$ ", $\frac{1}{4}$ ", $\frac{1}{8}$ ", $\frac{3}{16}$ ", $\frac{1}{2}$ ", and $\frac{5}{8}$ " O.D. tubing. Each **\$3.00**

No. 95-F for $\frac{1}{4}$ ", $\frac{1}{8}$ ", $\frac{3}{16}$ ", $\frac{1}{2}$ ", and $\frac{5}{8}$ " O.D. tubing. Each **4.00**

No. 103-F for $\frac{3}{4}$ ", $\frac{7}{8}$ ", and 1" O.D. tubing. Each **5.00**

EXTRA PARTS

No. 24455 Yoke only for 93-F. Each **\$1.25**

No. 24455 Yoke only for 95-F. Each **1.25**

No. 28361 Yoke only for 103-F. Each **2.25**

No. 25384 Compressor Cone. Each **.25**

No. 30077 Bar only for 93-F. Each **1.90**

No. 30231 Bar only for 95-F. Each **2.95**

No. 28360 Bar only for 103-F. Each **3.00**

No. 24461 Wing Nut. Each **.15**

§ IMPERIAL FLARING TOOL

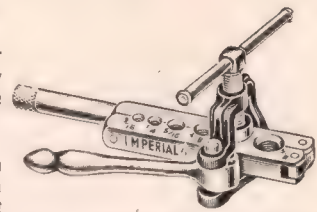
Pat. Nos. 1,724,697, 2,072,359

An improved Flaring Tool for the speed and accuracy necessary for modern installations. For use on soft copper, brass or aluminum tubing.

Tubing is clamped firmly in position by means of a lever with adjustable cam. An expanding screw provides compensation for wear on the face of the cam. Cam lever made of forged steel; bar is case hardened steel.

No. 255-F Imperial Flaring Tool for $\frac{3}{8}$ ", $\frac{1}{4}$ ", $\frac{1}{8}$ ", $\frac{3}{16}$ ", $\frac{1}{2}$ ", and $\frac{5}{8}$ " O.D. tubing. Price each **\$4.50**

No. 256-F Imperial Flaring Tool for $\frac{3}{8}$ ", $\frac{1}{4}$ ", $\frac{3}{16}$ ", $\frac{1}{2}$ ", $\frac{5}{8}$ ", and $\frac{3}{4}$ " O.D. tubing. Price each **4.95**



§ IMPERIAL FLARING AND SWEDGING TOOL

Pat. Nos. 1,724,697, 1,661,367, 2,072,359
Other Patents Pending

Will either flare or swedge tubing by changing a few simple adapters.

Operation is similar to the Imperial Flaring Tool shown at left. Parts include a bar, new type yoke for quick attachment to bar, adapters for swedging, and spreading cone for flaring.

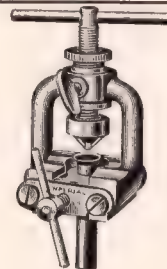
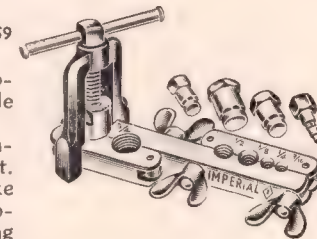
For flaring or swedging soft copper, brass or aluminum tubing, $\frac{3}{8}$ ", $\frac{1}{4}$ ", $\frac{3}{16}$ ", $\frac{1}{2}$ ", $\frac{5}{8}$ " and $\frac{3}{4}$ " O.D. Yoke is made of forged steel.

No. 175-FS Imperial Flaring and Swedging Tool, complete with flaring cone and 4 swedge adapters. Price each **\$9.35**

No. 176-FS Tool and Flaring Cone only. Price each **5.35**

No. 177-FS Set of 4 adapters to swedge $\frac{3}{8}$ ", $\frac{1}{4}$ ", $\frac{3}{16}$ ", $\frac{1}{2}$ ", $\frac{5}{8}$ " and $\frac{3}{4}$ " O.D. tubing. Price per set **4.00**

No. 178-FS Individual adapters. Price each **1.10**
(Specify size. The small adapter swedges $\frac{3}{8}$ ", $\frac{1}{4}$ " and $\frac{3}{16}$ " O.D. tubing. One adapter for each other size.)



IMPERIAL FLARING AND BURNISHING TOOL

Pat. No. 1,795,358

This tool spins out the tube to a soft flare and then burnishes it to a polished surface by means of three hardened rollers. A set of hardened jaws are a part of each tool.

No. 154-F Tool complete with set of jaws for $\frac{1}{4}$ ", $\frac{3}{8}$ ", $\frac{1}{2}$ " and $\frac{5}{8}$ " O.D. Tubing. Price Each **\$6.75**

No. 155-F Same as 154-F but with jaws for $\frac{1}{4}$ ", $\frac{3}{8}$ ", $\frac{1}{2}$ ", and $\frac{5}{8}$ " O.D. Tubing. Price Each **6.75**

No. 156-F Jaws only $\frac{1}{4}$ ", $\frac{3}{8}$ ", $\frac{1}{2}$ ", and $\frac{5}{8}$ " O.D. tubing. Price Each **1.25**

No. 157-F Jaws only $\frac{1}{4}$ ", $\frac{3}{8}$ ", $\frac{1}{2}$ " and $\frac{5}{8}$ " O.D. tubing. Price Each **1.25**



IMPERIAL TUBE CUTTER For Large Size Tubing

Pat. No. D-99,190

A heavy-duty tube cutter for extra large tubing. Roller-type tube holder; knurled handle.

For both hard and soft tubing. Cuts tubing as small as $\frac{3}{4}$ " O.D., but is recommended for tubing from $\frac{7}{8}$ " to 2 $\frac{1}{4}$ " O.D.

No. 204-F Tube Cutter, Each **\$4.95**



IMPERIAL TUBE CUTTER

Pat. No. D-99,190, 2,065,138

Will quickly cut copper, brass, block tin or lead tubing. Tubing rests against two rollers, making operation easy. Makes a clean, right angle cut, leaving no chips or burrs to clog the line, and does not flatten the tube.

An outstanding feature of this tube cutter is the vertical groove in the two rollers. If it is necessary to remove a cracked flare, the tubing can be cut right at the bottom of the flare without wasting any tubing.

Attached reamer is for use when tubing is not to be flared. Body is forged brass with polished chromium plate finish.

No. 174-F For $\frac{3}{8}$ " to $\frac{3}{4}$ " O.D. Tubing. Each\$2.75

No. 212-F For $\frac{7}{8}$ " to $1\frac{1}{8}$ " O.D. Tubing. Each 3.25



IMPERIAL TUBE CUTTER

Pat. No. D-99,190

Makes a clean, right angle cut, leaving no burrs or chips to clog the line. Does not flatten the tubing.

Cuts copper, brass, block tin, aluminum and lead tubing from $\frac{1}{8}$ " to $\frac{3}{4}$ " outside diameter.

Furnished with a reamer which should be used when tubing is not to be flared.

Body is made of forged brass with polished chromium plate finish.

No. 94-F Imperial Tube Cutter. Each\$2.25

IMPERIAL JUNIOR TUBE CUTTER

Pat. No. 2,126,951

Small size cutter for close places. Occupies little space in tool box. Make clean, right-angle cut. Reamer folds down out of the way when not in use. Knurled adjustment handle.



No. 127-F Junior Tube Cutter, for $\frac{1}{8}$ " to $\frac{3}{4}$ " O. D. Tubing. Each\$1.25

EXTRA PARTS FOR IMPERIAL TUBE CUTTERS

No. 32633 Cutting Wheel for Nos. 174-F and 212-F. Each\$0.25

No. 96-F Cutting Wheel for Nos. 94-F and 104-F. Each25

No. 26882 Cutting Wheel for No. 127-F. Each25

No. 33045 Cutting Wheel for No. 204-F. Each35

No. 26883 Screw for Cutting Wheel for Nos. 174-F, 212-F, 94-F, 104-F, 127-F. Each06

No. 33046 Screw for Cutting Wheel for No. 204-F. Each06

No. 97-F Reamer Blade for Nos. 174-F, 212-F, 94-F. Each25

No. 31296 Screw for Reamer Blade for Nos. 174-F, 212-F, 94-F. Each03

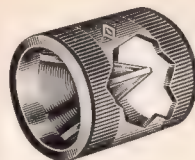
REAMER



Generally used with No. 204-F Tube Cutter, as the latter is too large to have reamer attached. There is an extra blade in hollow handle.

No. 207-F Reamer. Each\$0.90

§ New Item.



§ IMPERIAL INNER AND OUTER REAMER

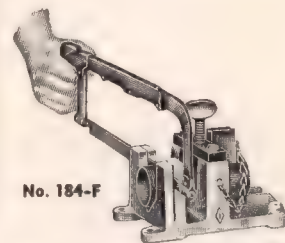
With this convenient tool you can ream both inside and outside edges of copper, brass or aluminum tubing. Handles all sizes of tubing from $\frac{1}{8}$ " O.D. to $1\frac{1}{2}$ " O.D.

Tubing is introduced from one end of tool for inside reaming, and from the other end for outside reaming. Tool cuts in either direction and is self centering so that an evenly balanced job is turned out.

Tool has 3 hardened, hollow ground, tool steel cutters which will give exceptionally long service. Cutters are protected against damage, when not in use, by outside shell of tool.

Body is knurled for easy handling.

No. 208-F Inner and Outer Reamer. Each\$1.20



No. 184-F

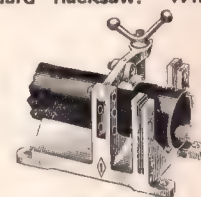
IMPERIAL-BEAVER SAWING VISES

For making perfect right-angle cuts on hard or soft pipe and tubing. Required in making joints with solder fittings. No. 184-F is of aluminum; No. 185-F of malleable iron. Used with standard hacksaw. Will

not mar or crush tubing. Removable steel inserts.

No. 184-F For $\frac{1}{8}$ " to 2" tubing
Each\$6.50

No. 185-F For $1\frac{1}{2}$ " to 4" tubing
Each\$15.00



No. 185-F



IMPERIAL FLARING AND CUTTING TOOL KITS

Kit has necessary tools for a quick cutting and flaring job on copper, brass and aluminum tubing. Tools packed in steel box.

No. 225-F Tool Kit, consists of No. 93-F Flaring Tool for $\frac{1}{8}$ ", $\frac{1}{4}$ ", $\frac{3}{8}$ ", $\frac{1}{2}$ " and $\frac{3}{4}$ " O.D. tubing; No. 174-F Tubing Cutter for $\frac{1}{8}$ " to $\frac{3}{4}$ " O. D. tubing; No. 32633 Extra Cutting Wheel. Price each.....\$6.00

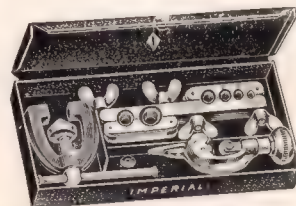
No. 125-F Same as 225-F, excepting has 94-F Tube Cutter. Each..... 5.50

No. 1225-F Same as 225-F excepting has 193-F Flaring Tool instead of 93-F. Price each 6.25

No. 226-F Tool Kit, consists of No.95-F Flaring tool for $\frac{1}{4}$ ", $\frac{3}{8}$ ", $\frac{1}{2}$ " and $\frac{3}{4}$ " O.D. tubing; No. 174-F Tubing Cutter for $\frac{1}{8}$ " to $\frac{3}{4}$ " O.D. tubing; No. 32633 Extra Cutting Wheel. Price each 7.00

No. 126-F Same as 226-F, excepting has 94-F Tube Cutter. Each..... 6.50

No. 1226-F Same as 226-F excepting has 195-F Flaring Tool instead of 95-F. Price each 7.25



IMPERIAL FLARING AND CUTTING TOOL KIT

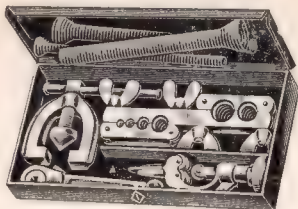
An exceptionally efficient kit for cutting and flaring copper, brass and aluminum tubing. Contains No. 174-F popular roller type Tube Cutter for $\frac{1}{8}$ " to $\frac{3}{4}$ " O.D. tubing and No. 175-F wide range type Flaring Tool for $\frac{1}{8}$ ", $\frac{1}{4}$ ", $\frac{3}{8}$ ", $\frac{1}{2}$ ", $\frac{5}{8}$ " and $\frac{3}{4}$ " O.D. tubing. Also has No. 32633 Extra Cutting Wheel. Packed in durable steel box.

No. 131-F Imperial Flaring and Cutting Tool Kit.
Price each\$7.85

No. 1131-F Same as No. 131-F excepting has 176-FS Flaring Tool instead of 175-F. Price each 8.35

IMPERIAL TUBING TOOL KIT

A handy kit containing the necessary tools to quickly and accurately cut, flare and bend copper, brass and aluminum tubing. A ratchet wrench is included.



Contains No. 174-F roller type Tube Cutter for $\frac{1}{8}$ " to $\frac{3}{4}$ " O.D. tubing; No. 32633 Extra Cutting Wheel; No. 175-F Flaring Tool for $\frac{1}{8}$ ", $\frac{1}{4}$ ", $\frac{3}{8}$ ", $\frac{1}{2}$ ", $\frac{5}{8}$ ", and $\frac{3}{4}$ " O.D. tubing; No. 102-F Spring Tube Benders for $\frac{1}{4}$ ", $\frac{3}{8}$ " and $\frac{1}{2}$ " O.D. Tubing, and No. 123-C Ratchet Wrench. Packed in steel box.

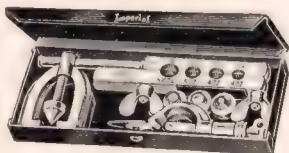
No. 133-F Imperial Tubing Tool Kit. Price each. . . . \$9.80

No. 1133-F Same as 133-F excepting has 176-FS Flaring Tool instead of 175-F. Price each \$10.30

No. 1134-F Same as 133-F excepting has 175-FS Flaring and Swedging Tool instead of 175-F. Price each. . 14.30

BLOCK TIN FLARING KIT

Contains tools to quickly cut and flare block tin pipe. Will cut $\frac{1}{8}$ " to $\frac{3}{4}$ " O.D. tin pipe, copper, brass or lead tubing.



Flaring tool gives the proper 90° flare without cracking or splitting the pipe. Flares $\frac{1}{4}$ " I.D. 4 oz.; $\frac{3}{8}$ " I.D. 4 oz.; $\frac{3}{8}$ " I.D. 5 oz., and $\frac{1}{2}$ " I.D. 5½ oz. block tin pipe.

Packed in black lacquered steel case.

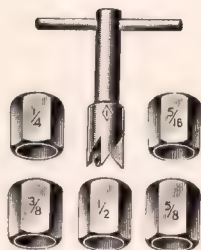
No. MB-85 Block Tin Flaring Kit complete. Price, each. \$6.50

No. MB-86 Block Tin Flaring Tool only. Price, each . . 4.25

No. MB-94-F Cutting Tool only. Price, each 2.25

REFACING TOOL

This tool will reface seats in a few seconds and assures a tight, leak-proof joint. Reamer has five flutes which assures a smooth cut and eliminates chattering. Furnished with adaptors to take $\frac{1}{4}$ ", $\frac{1}{8}$ ", $\frac{3}{8}$ ", $\frac{1}{2}$ " and $\frac{5}{8}$ ".

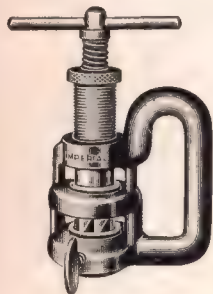


No. 98-F Tool complete. Price each \$4.50
 $\frac{1}{8}$ " Adaptor may be ordered separately.

No. 100-F Adaptor only. Price each \$0.30

No. 99-F Reamer only. Price each \$3.50

IMPERIAL RESEATING AND REFACING TOOL



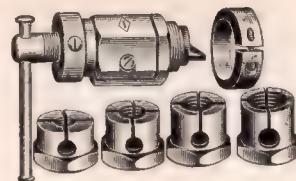
For refacing or reseating fittings. Has a hardened seven-fluted reamer. Comes complete with one bushing. Bushing can be furnished for $\frac{1}{4}$ ", $\frac{1}{8}$ ", $\frac{3}{8}$ ", $\frac{1}{2}$ " and $\frac{5}{8}$ " size. Specify size desired.

No. 158-F Tool with one bushing. Each \$12.00

No. 159-F Bushing only (Specify Size). Each95

IMPERIAL RETHREADING AND REFACING TOOL

Quickly reconditions damaged or over-sized male S.A.E. threads on fittings or valves and refaces marred or scratched seats. Single cutter with adjustable feed; will not chatter. Clamps directly on threads, assuring seat that will be concentric with threads. Complete with collar to hold dies.



No. 203-F Rethreading and Refacing Tool, complete with $\frac{1}{4}$ " die, Each \$7.85

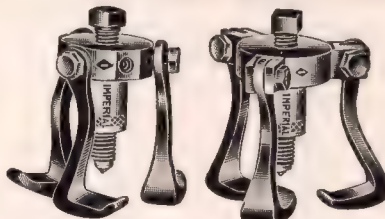
No. 198-F Tool only, Each 6.85

No. 200-F Set of four dies $\frac{1}{4}$ ", $\frac{3}{8}$ ", $\frac{1}{2}$ " and $\frac{5}{8}$ ". Each set 3.80

No. 201-F Dies only— $\frac{1}{8}$ ", $\frac{1}{4}$ ", $\frac{1}{8}$ ", $\frac{3}{8}$ ", $\frac{1}{2}$ ", and $\frac{5}{8}$ ". Each size 1.00

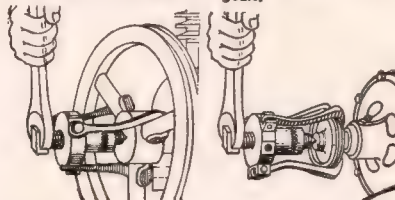
No. 202-F Replacement Cutter. Each75

IMPERIAL UNIVERSAL PULLEY AND FLYWHEEL PULLER



Assembly and use of puller for pulling spoked wheels. Either 2 or 3 arms may be used.

Assembly and use of puller for pulling solid wheels, pulleys and gears.



Puller will take spoked wheels regardless of size, so long as the hub diameter is less than 3 inches and the wheel is within the depth reach of the puller. Will take solid wheels up to 7 inches outside diameter.

For wheels having an odd number of spokes it is used with 3 arms, and for wheels having an even number of spokes it is used with 2 arms. Arms are so designed that the puller can be used with wheels having tilted spokes and also with wheels which have a minimum amount of space between the seal plate and hub.

An adjustable sleeve prevents tilting of the screw when pressure is applied on 2 arm spoke-pulls.

When used to pull from the outside of solid wheels, this puller is assembled with arms suspended from clevises.

Arms are made from heat-treated chrome vanadium steel forgings and body is machined from cold drawn steel. Pressure screw is extra large so that screw head can be hammered in removing hard-to-start pulleys.

Net weight approx. 2½ lbs. Length, 4½-in. Diameter $\frac{1}{8}$ -in. Depth reach, 1½-in.

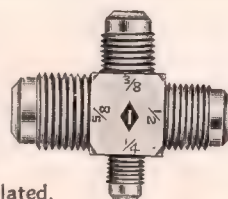
No. 372-F Puller for solid and spoked wheels. Complete with clevises. Price Each \$6.85

No. 370-F Puller for spoked wheels only. Same as No. 372-F except furnished without clevises. Price Each. . 5.85

No. 371-F Clevises only. Per set of 3. Price 1.00

IMPERIAL CROSS PLUG

A handy tool which should be in every service engineer's kit. For temporary plugging when working on a system. Has four different sizes of S.A.E. Flare threads: $\frac{1}{4}$ ", $\frac{3}{8}$ ", $\frac{1}{2}$ " and $\frac{5}{8}$ " O.D. Each size is stamped on the body opposite the corresponding thread. Made of steel and cadmium plated.



No. 638-F Imperial Cross Plug. Price Each \$1.50

TUBE BENDER

Makes it a simple matter to bend tubing by hand without collapsing the tube.



Specially prepared spring wire is cadmium plated. Overall length of 1/4", 3/8", 1/2" benders is 10". 3/4", 1/2", 5/8" benders 12" overall.

No. 101-F Set of six benders. Price per set	.....	\$2.05
No. 163-F Set of four benders, 1/4", 3/8", 1/2" and 5/8". Price per set	.....	1.45
No. 102-F—1/4"	\$0.25	
1/8" .....	.30	
3/8" .....	.35	
1/2"		\$0.40
5/8" .....		.45
3/4" .....		.50



INSIDE BENDING SPRING

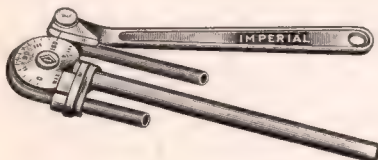
Furnished in 3 sizes, for 3/8" 1/2" and 5/8" O.D. copper or brass tubing. Length of bender is 6 feet.

No. 302-F Inside Bending Spring			
3/8" Each	\$0.60	3/8" Per foot	\$0.12
1/2" Each .....	.85	1/2" Per foot .....	.16
5/8" Each	1.25	5/8" Per foot .....	.25

IMPERIAL HAND TUBE BENDER

A one piece, open side bender; can be used to make bends at end or any part of tubing. Especially handy where tubing has been partially connected. Available in sizes from 1/8" O.D. to 3/8" O.D. Bends to any angle up to 180°. Form is calibrated to show degree positions so that duplicate bends may be made at any angle.

Constructed of steel; light in weight; extremely rugged and durable.



Cat. No.	O.D. of Tubing	Radius to Ctr. of Tube	Price Each
364-F	1/8"	1 7/8"	\$2.95
364-F	1/4"	1 3/4"	3.25
364-F	3/8"	1 1/2"	3.50
364-F	1/2"	1 1/4"	3.75

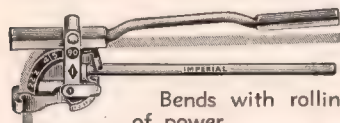
*1/8" Bender may also be used for 1/8" O.D. tubing.

IMPERIAL HAND TUBE BENDER

Similar in operation and construction to No. 364-F shown above. Not calibrated to show degree positions. For 1/2" 5/8", and 3/4" O.D. tubing.



Cat. No.	O.D. of Tubing	Radius to Ctr. of Tube	Price Each
364-F	1/2"	1 1/2"	\$5.25
364-F	5/8"	2"	7.50
364-F	3/4"	2 1/2"	9.00



IMPERIAL 4-IN-1 TUBE BENDER

For Large Sizes of Tubing

Bends with rolling action requiring a minimum of power.

No. 365-F Imperial 4-in-1 Tube Bender. For bending 3/8" and 1/2" O.D. tubing on 1 1/2" radius, and 5/8" and 3/4" O.D. tubing on 2 1/2" radius. Each	\$12.50
No. 366-F Imperial 4-in-1 Tube Bender. For bending 5/8" and 3/4" O.D. tubing on 3" radius, and 1" and 1 1/8" O.D. tubing on 4" radius. Each	\$19.50



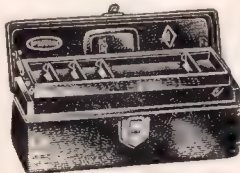
Pat. Nos. 2,171,907, 1,852,515

IMPERIAL HEAVY-DUTY TUBE-BENDING TOOL

This easy operating tube bender is used for 3/8", 1/2", 5/8" and 3/4" O.D. copper, brass or aluminum tubing by simply changing the mandrel and adjusting the block. Long lever-

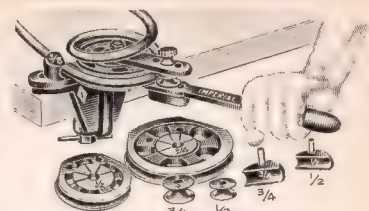
age and adjustable operating lever make it possible to apply considerable force without effort, avoiding sudden strains which injure tubing. Bender is marked showing 90° and 180° positions. For right or left-hand bends. Removable handles. Packed in "Spill-proof" steel chest.

No. 360-F Imperial Heavy-Duty Tube Bending Tool. Each	\$29.85
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\$ NEW MULTI-SIZE COMBINATION COIL MAKER AND TUBE BENDER

Will not only bend tubing to any angle but also can be used for making round or obround coils. Makes right or left hand bends or coils.



One tool, complete with attachments, will handle 3 sizes of soft copper, brass or aluminum tubing—1/2", 5/8" and 3/4" O.D.—in .020 to .065" wall thickness. Or tool can be bought for one size only and attachments added as desired.

Tool clamps on bench and gives exceptionally good leverage, making bending extremely easy. Tubing will not get out of round. Bending form calibrated to show 45°, 90°, 135° and 180° positions.

Tool is adapted for different sizes of tubing simply by changing mandrel, roller and clamp.

Bends and coils formed have the following dimensions:

Tube Size	Radius to Center of Tube	Diameter of Coil
1/2"	1 7/8"	3 3/4"
5/8"	2 3/4"	5 1/2"
3/4"	3 1/8"	6 3/8"

Complete Tools

No. 474-F For 1/2", 5/8" and 3/4" O.D. tubing*. Each	\$22.00
No. 475-F For 1/2" O.D. tubing* only. Price each	12.00
No. 476-F For 5/8" O.D. tubing only. Price each	13.00
No. 477-F For 3/4" O.D. tubing only. Price each	14.00

Attachments Only

Each unit consists of mandrel, roller and clamp for adapting tool to additional sizes:

No. 478-F For 1/2" O.D. tubing. Price per Unit	4.00
No. 479-F For 5/8" O.D. tubing. Price per Unit	5.00
No. 480-F For 3/4" O.D. tubing. Price per Unit	6.00

*Tool can be used with 1/2" attachments for bending 3/8" tubing if necessary.

IMPERIAL BENDING TOOL

For larger sizes of copper, brass and aluminum tubing. Will save time and money where uniform and accurate bends are required. For tubing between .020" and .065" wall thickness.



No. 160-F 3/8". Ea...	\$4.50	No. 160-F 5/8". Ea...	\$7.50
No. 160-F 1/2". Ea...	5.00	No. 160-F 3/4". Ea...	15.00

IMPERIAL HI-DUTY SAFETY CHARGING LINES



Has seamless bronze corrugated core. Brass couplings with 1/4" male flare thread are soldered to core. Spring-wire reinforcing at ends prevents

excessive bending at points of greatest strain.

Extensions are 4 1/2" long. With these extensions a new flare can be made if the old one becomes worn or broken. Longer charging line can be made by using longer pieces of tubing.

WITH COPPER TUBE EXTENSIONS

Catalog No.	Overall Length	Price Each
271-F	24"	\$1.85
272-F	30"	2.00
273-F	36"	2.30



IMPERIAL CHARGING LINE

This is a new charging line made for economy and service. Has a special composition core, covered with a 4-ply woven fabric and an outer covering of Neoprene. This line is extremely flexible, and will not break under repeated flexing and twisting.

Furnished with two copper tube extensions assembled by brass connections with 1/4" male flare thread.

Catalog No.	Overall Length	Price Each
177-F	24"	\$1.60
178-F	30"	1.75
179-F	36"	1.95

\$ New item.

NEW IMPERIAL SERVICE VALVE KIT FOR HER- METIC UNITS

A new, improved service valve kit for charging, purging and testing an increased number of hermetically sealed units. Eliminates a separate valve for each unit. Valve equipped with hand wheel for easy operation. Special 3" compound retard gauge for pressure readings. Reads from 0 to 30" vacuum in inches and pressure scale from 0 to 50 lbs. with retard to 200 lbs. in 5 lb. graduations. Has temperature scale and rear pointer adjustment.

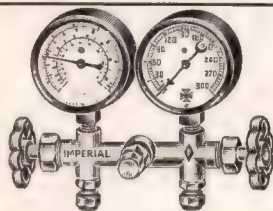
Kit furnished complete in special metal case so arranged so that wheel handle and gauge need not be removed from valve when placed in box. Includes 10 adapters, 5 wrenches, 5 gaskets, plug for gauge connection; also a set screw wrench for loosening valve on machines requiring spline wrench. Chart on cover list names of refrigerators and type of adapter and wrench required for servicing. Services following units using adapters and keys indicated (prices shown are for parts when furnished separately):

Machine Make	Adapter No.	Price Each	Wrench Used	Color on Wrench	Price Each
Airtemp	181-F-2	\$0.40	181-F-13	Green	\$0.72
Bohn SO ₂	181-F-6	.40	Main Stem		
Bohn CH ₂ CL	181-F-4	.40	181-F-12	White	.48
Coldspot (to 1934)	181-F-6	.40	Main Stem		
Coldspot (1935 and later)	181-F-8	.40	181-F-11	Yellow	.72
Crosley	Valve Body Nut	....	181-F-13	Green	.72
Frigidaire	Valve Body Nut	....	Main Stem		....
Frigidaire (late models)	181-F-19	.40	Main Stem		....
General Electric	Valve Body Nut	....	181-F-13	Green	.72
General Electric (CG-1-A16)	181-F-18	.60	181-F-13	Green	.72
Gibson	181-F-3	.40	181-F-9	Red	.72
Grunow	181-F-3	.40	181-F-9	Red	.72
Majestic	Valve Body Nut	....	181-F-9	Red	.72
Servel	Valve Body Nut	....	181-F-9	Red	.72
Sparton	181-F-3	.40	181-F-9	Red	.72
Trukold	181-F-3	.40	181-F-9	Red	.72
U.S.R. & Tel.	181-F-7	.40	181-F-9	Red	.72
Westinghouse (large float)	181-F-5	.40	181-F-9	Red	.72
Westinghouse (small float)	181-F-2	.40	181-F-10	Blue	.48

No.	Price Each
No. 190-F Service Valve Kit complete with 3" compound retard gauge..	\$12.35
No. 189-F Service Valve Kit same as 190-F except gauge is 2 1/2"....	12.10
No. 182-F Service Valve Kit same as 190-F and 189-F except without gauge	10.00
No. 181-F Valve only 1/4" flare (with gauge connection and plug)....	1.80
No. 181-F-17 Steel Stem .....	.55

No. 300-C CHARGING AND TESTING UNIT

Back seating type valves, an added precaution against leaks not found in units which do not have this feature. Wheel handles for quick adjustment of valves.



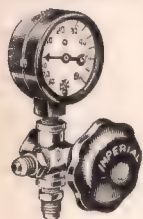
All connections are for 1/4" O.D. flare.

No. 300-C Imperial Charging and Testing Unit less gauges\$3.00

No. 300-C Imperial Charging and Testing Unit with 2" gauges 5.40

No. 301-C Imperial Charging and Testing Unit with 2 1/2" gauges 5.85

The Compound Gauge, 30" to 60 lbs., on No. 301-C can be furnished with temperature scale at no extra charge. If desired specify with temperature scale.



NO. 400-C IMPERIAL CHARGING AND TESTING UNIT

The valve is of back seating type. Furnished with wheel handle to adjust valve quickly and eliminate use of ratchet wrench.

Connections for 1/4" O.D. with 1/8" female iron pipe thread on top for gauge.

Furnished with or without gauge.

No. 400-C-Charging and Testing Unit complete with 2 1/2" compound gauge\$3.30

No. 400-C-Charging and Testing Unit complete with 2" compound gauge 3.10

No. 400-C-Charging and Testing Unit without gauge 1.70

§ New Item.

† Price change.

IMPERIAL HI-LO CHARGING AND TESTING UNIT

This is an entirely new type of charging and testing unit which combines all the advantages of a double gauge unit with the lightness, compactness and ease of handling of a single gauge unit. When connected to both sides of system, permits reading the pressure on either the high or low side at any time with a single gauge and a single valve. Also permits by-passing, from high to low side, whenever desired, without capping the charging and purging port.

May be used for: charging liquid gas in high side; charging gas into low side; purging gas from gauge lines; purging air or gas from high side; charging oil in low side; testing low side for leaks; setting low side controls; setting expansion valves. In addition, it may also be used separately on the high or low side with exceptional convenience.

Simple and speedy to operate. Has a single master control handle which operates a double-acting valve.

Unit also has an auxiliary needle valve which controls the charging and purging port at the center.

Valve body and handle pointer are made of brass forgings. Stem is made of steel and is of heavy-duty, double-seating type. Valve seats are extra large giving practically a full opening to both sides. Triple lead thread on stem assures fast, positive valve action.

Valve body is machined for 1/8" female iron pipe thread at all three connections. 1/4" half unions are screwed into body so that they can be replaced should the threads become worn, or elbow connections desired.

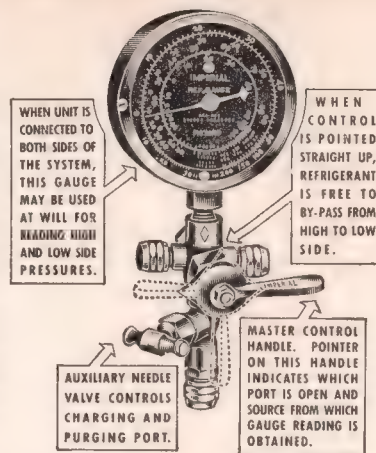
No. 505-C Imperial Hi-Lo Charging and Testing Unit.

Furnished with No. 284-C 3" black face compound gauge. 0-30" vacuum scale in one inch calibrations. Pressure to 50 lbs. with retard to 200 lbs. Has rear calibrator. Price, each\$5.70†

No. 504-C Same as No. 505-C, excepting with No. 284-C 2 1/2" gauge. Price, each 5.45

No. 500-C Same as above, excepting with 2 1/2" compound gauge. 0-30" vacuum in 5" graduations, 0-150 lbs. pressure with retard to 250 lbs. Has rear calibrator. Price, each\$5.45†

No. 501-C Same as above, but less gauge. Price each 3.35



WHEN UNIT IS CONNECTED TO BOTH SIDES OF THE SYSTEM, THIS GAUGE MAY BE USED AT WILL FOR READING HIGH AND LOW SIDE PRESSURES.

WHEN CONTROL IS POINTED STRAIGHT UP, REFRIGERANT IS FREE TO BY-PASS FROM HIGH TO LOW SIDE.

AUXILIARY NEEDLE VALVE CONTROLS CHARGING AND PURGING PORT.

MASTER CONTROL HANDLE. POINTER ON THIS HANDLE INDICATES WHICH PORT IS OPEN AND SOURCE FROM WHICH GAUGE READING IS OBTAINED.

§ IMPERIAL BY-PASS TOOL

A handy tool for pumping down a system where the line is clogged.

To use, clamp the tool on the liquid line near receiver, screw fitting into tool and connect to suction side of compressor. Turning the stem on the By-Pass Tool punctures the tubing.

There is no loss of gas and no unpleasant fumes. Made for use on 1/4" O.D. tubing.

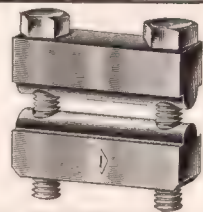
No. 275-C Imperial By-Pass Tool. Price each \$2.50



IMPERIAL PINCH-OFF TOOL

Furnished to pinch tubing up to and including 1/2" outside diameter.

No. 146-F Pinch-Off Tools, List Price, each\$0.50



PINCH-OFF TOOL

For temporarily closing copper tubing while making repairs. Tool also opens and rounds the tubing back in shape.

For 1/4", 3/8", and 1/2" tubing.

No. 106-F Pinch-Off Tool. Each\$1.85

No. 105-F Pinch-Off Tool similar to No. 106-F but has hex nuts instead of bolts with wing nuts. Does not have extra extension of bar. Each\$1.25



§ IMPERIAL REFRIGERANT TRANSFER UNIT



The Imperial Refrigerant Transfer Unit is used to transfer refrigerant from large cylinders to small cylinders used by installation and service engineers.

This unit operates on the principle of cooling the refrigerant before entering the drums. This method has been proven by experience to be more efficient and offer less hazards than other methods. Four different refrigerants may be transferred through this unit at a rate of better than five pounds per minute. This is one of the most

trouble-free and fastest methods of transferring refrigerant.

Strainers are recommended to be placed on inlet connections of unit for protection of valves.

Furnished complete with:

- 4 No. 178-FT 30" Charging Lines.
- 4 No. 193-C 1/4" Sylpak Valves.
- 4 No. 670-F 1/4" Swivel Unions.
- 4 No. 48-C 3/8" O.D. x 3/8" I.P.T. Strainers.

No. 476-C Imperial Refrigerant Transfer Unit, complete **\$66.38**

No. 475-C Imperial Refrigerant Transfer Unit, less Charging Lines, Valves, Swivel Unions and Strainers **46.65**



TEMPERATURE AND PRESSURE CONTROL PUMP

A pump for checking and adjusting pressure controls. Has double washer so that it will create pressures to 50 lbs. and vacuum to 28 inches with a single stroke of the plunger.

Double cup washers are back to back under constant spring tension. This keeps washers against barrel at all times, assuring full capacity.

Supplied with tee connection on the end, having 1/8" female iron pipe thread for gauge and 1/4" male flare on the branch.

When using a gauge with this pump, use Imperial No. 122-C Compound Gauge, 30" vacuum to 60 lbs. pressure.

No. 19-D Pump. Barrel 5"x1 1/2". Price, each **\$2.75**

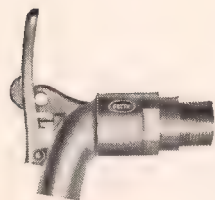
No. 18-D Pump. Barrel 8"x1 1/2". Price, each **3.00**

PURGING HOSE

Made of good quality red rubber hose. 1/2" outside diameter, 1/4" inside diameter. Boxed in 50 foot coils.



No. 265-C Imperial Purging Hose—Price per 50-foot coil **\$1.75**



SETTE SELF-CLOSING FAUCET (For Barrels and Drums)

This faucet will hold compressor oils, brine fluids, naphtha, paints, lacquers, thinners, solvents of all kinds and other liquids without leaking.

Metal-to-metal seat, no packing to wear out.

Automatically self-closing. Push lever control; handle is designed so that operating the faucet will not tip or tilt the barrel.

Faucet may be locked in open or closed position.

No. G-261 Sette Faucet. Each **\$1.00**

§ New item.



PRESSURE AND COMPOUND GAUGES

These gauges are of sturdy construction with steel case and a completely independent movement and dial. The socket, bourdon tube, movement dial and pointer comprise an integral unit which will function with accuracy.

Some of the gauges developed by our engineers have some outstanding features for refrigeration work.

No. 121-C Pressure Gauges

Furnished in 2" or 2 1/2" Case in either 1/8" or 1/4" Male I.P.T.

0—30 lbs.)	
0—50 "	)	Price
0—100 ")	
0—150 "	)	2 "—\$1.00 Each
0—200 ")	
0—300 "	)	2 1/2"—\$1.20 Each
0—500 ")	

Specify Cat. No., Reading, Size of Case and I.P.T.



NO. 122-C COMPOUND GAUGES

Furnished in 2" or 2 1/2" Case in either 1/8" or 1/4" Male I.P.T.

30"—60 lbs. Vacuum in Inches.
30"—100 lbs. Vacuum in 2 inch Calibrations.
30"—150 lbs. Vacuum in 5 Inch Calibrations.
Price—2"—\$1.30 Each.
Price—2 1/2"—\$1.50 Each.

Specify Cat. No., Reading, Size of Case and I.P.T.

NO. 286-C COMPOUND GAUGES

With Freon, Sulphur Dioxide and Methyl Chloride Temperature Scale and with rear pointer adjustment.

Furnished in 2 1/2" Case in either 1/8" or 1/4" Male I.P.T.

30"—60 lb. Vacuum in inches. Price, Each **\$1.80**



COMPOUND RETARD GAUGES With Rear Pointer Adjustment No. 284-C

2 1/2" Case—1/8" Male I.P.T.
30"—50 lbs. Retard to 200 lbs.
Vacuum in inches.
Has Freon, Sulphur Dioxide and Methyl Chloride Temperature Scale. Price Each \$2.10

3" Case 1/8" Male I.P.T. 30"—50 lbs. Retard to 200 lbs. Vacuum in inches. Has Freon, Sulphur Dioxide and Methyl Chloride Temperature Scale. Price Each **\$2.35**
Specify Size of Case.

COMPOUND RETARD GAUGES

NO. 285-C

With Rear Pointer Adjustment.

2 1/2" Case—1/8" Male I.P.T. 30"—60 lbs. Retard to 100 lbs. Vacuum in Inches. Price, Each **\$2.10**

With Imperial Products you are assured of keeping up to the minute with latest developments for efficient, dependable service.



IMPERIAL SWEDGING TOOLS (Patented)

For joining two pieces of tubing without using a coupling. One piece is fitted into the enlarged end of the other, then both are soldered together.



- No. 195-S Tool Kit. Includes flaring bar and 4 swedging tools for 1/4", 3/8", 1/2", and 5/8" O. D. Tube—Complete in steel case, Each...\$6.10
 No. 193-S Swedging Tool Set for 1/4", 3/8", 1/2", and 5/8" O. D. tubing. Does not include flaring tool bar or steel case. Price per set...\$3.15
 No. 93-S Tool for 1/4" Tube, Each.....\$0.65
 No. 93-S Tool for 3/8" Tube, Each.....0.70
 No. 93-S Tool for 1/2" Tube, Each.....0.75
 No. 93-S Tool for 1/2" Tube, Each.....0.90
 No. 93-S Tool for 5/8" Tube, Each.....1.00
 No. 93-S Tool for 3/4" Tube, Each.....1.05
 No. 30231 Flaring Tool Bar only. Each.....2.95

IMPERIAL REVERSIBLE RATCHET WRENCH



The ratchet may be instantly reversed by the convenient rounded control. Wrench is made of drop forged steel. Ratchet has 1/4" square opening. Handle openings are 3/8" and 1/4" square with 1/2" hex socket.

- No. 138-C Imperial Reversible Ratchet Wrench.
 Price Each\$1.25



IMPERIAL RATCHET WRENCH

A steel forged ratchet wrench, especially adapted for use on small refrigerant cylinders, shut-off valves, packing gland wrenches, etc. Ratchet has 1/4" square opening. Handle of wrench has 3/8" square opening, 1/4" square opening and 1/2" hex.

- No. 123-C Ratcht Wrench. Price Each\$0.95

IMPERIAL RATCHET WRENCH



This ratchet wrench has hardened steel ratchet and handle. Has 1/4" square opening in ratchet end, as well as in the handle. Wrench is adapted for use on shut-off valves, packing gland wrenches and many other needs of the refrigeration service man.

- No. 98-C Ratchet Wrench. Price Each\$0.55

IMPERIAL PACKING GLAND WRENCHES

Imperial Packing Gland Wrenches are drop-forged of selected steel and are carefully heat-treated to bring out the ultimate strength of the steel. They are designed to fit the packing gland nuts on refrigeration valves.



No. 103-C

Obround opening 1/2" long x 3/8" wide. 1/4" Square Drive. Outside Diameter 1 1/8". Overall Length 1 3/4". Price Each\$0.45



No. 228-C

Prongs 1/8" Deep x 1/8" Wide. 1/4" Square Drive. Inside Diameter 1 1/8". Outside Diameter 1 1/4". Overall Length 1 3/4". Price each\$0.40



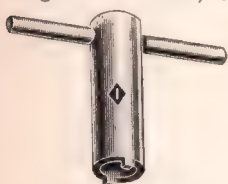
No. 229-C

Socket Opening 3/8" Square. 1/4" Square Drive. 3/8" Outside Diameter, Overall Length 1 3/8". Price, each\$0.40

Socket Opening 1/2" Square. 1/4" Square Drive. 1/2" Outside Diameter, Overall Length 1 3/8". Price, each\$0.40

No. 230-C

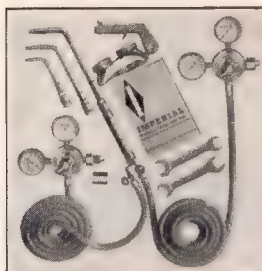
Tee Handle Type, Prongs 1/8" Deep x 1/8" Wide. Inside Diameter 1 1/8". Outside Diameter 1 1/2". Overall Length 2". Price, each\$0.45



No. 231-C

Tee Handle Type. Prongs 1/8" Deep x 1/8" Wide. Inside Diameter 21/64". Outside Diameter 1/2". Overall Length 2". Price each\$0.45

IMPERIAL NO. 1178 WELDING OUTFIT



This is an "All Purpose" outfit ideally suited to the requirements of refrigeration service repair shops. With this outfit, each Regulator is furnished with two Gauges, enabling the operator to know the cylinder as well as the working pressures of the gases being used. This is an advantage since it eliminates the possibility of running out of gas when a job is in progress.

Type 8X-3 Welding Torch with 3 Welding Tips (Nos ISC, 3SC and 6SC).

Type KK Double Gauge Oxygen Regulator.

Type AAA Double Gauge Acetylene Regulator.

No. 314-H 12 1/2-ft. length Heavy Duty Oxygen Hose.

No. 315-H 12 1/2-ft. length Heavy Duty Acetylene Hose.

2 Wrenches, Goggles, Spark Lighter, Tank Adapter and Welding Instruction Book.

- No. 1178 Imperial Welding Outfit. Price\$57.00
 With Type 8X Cutting Attachment. Price78.00
 Steel Carrying Case. Extra6.00

ILLUMINATING GAS and AIR BLOW TORCHES



These torches, for use with illuminating gas and compressed air, are very efficient and economical for preheating small

work. All four sizes are used in machine and repair shops for soldering, brazing, heating and annealing tools, and for hardening and brazing numerous items. Every tool-room needs these torches.

Torch No.	Inside Diameter of Air Nozzle	Inside Diameter of Gas Nozzle	Outside Diameter of Tubing at Hose End	Price Each
R-0	1/8 inch	1/4 inch	1/2 inch	\$2.50
R-1	1/8 inch	21/64 inch	3/8 inch	2.75
R-2	1/4 inch	33/64 inch	1/2 inch	3.50
R-3	3/8 inch	22/32 inch	5/8 inch	4.50

NATURAL GAS and AIR TORCHES



Especially designed for natural gas, artificial gas, mixed gas, etc.

Made of brass and have two valves, one for regulating the compressed air and one for regulating the gas, giving a fine adjustment of the flame.

The construction of the torch is such that the gas and compressed air are properly mixed before they reach the point of combustion, thus assuring the greatest efficiency and lowering operating costs.

Torches are made in five sizes to take a wide range of work from very fine small work to heavy preheating work.

These torches are used by engineers, installation and service men for preheating and soldering.

No. NR000—Torch is especially designed for use where a very fine needle flame is required. O.D. at hose end 1/8-in. Each\$5.00

No. NR00—Gives a larger flame for faster work. O.D. at hose end 1/8-in. Each\$5.00

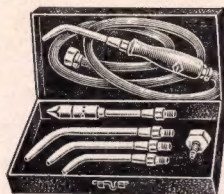
No. NR0—Similar to NR00 but larger. O.D. at hose end 1/8-in. Each\$5.00

No. NR1—O.D. at hose end 3/8-in. Each\$5.50

No. NR2—Used for heavy soldering, brazing and heating. Similar to NR1 but larger. O.D. at hose end 1/2-in. Each\$8.00

No. NR3—Similar to No. NR2 but larger for extra heavy soldering, brazing and heating. O.D. at hose end 5/8-in. Each\$14.00

IMPERIAL SOLDERING AND BRAZING APPLIANCES



No. 32 HI-DUTY OUTFIT

The No. 32 is an excellent outfit for refrigeration work and for all kinds of heavy and light soldering and brazing. Torch burns acetylene, the tips drawing oxygen from the atmosphere, producing a very hot flame.

The No. 32 outfit consists of:

- Type K-1 tip and mixer assembly for fine soldering.
- Type K-2 tip and mixer assembly for light soldering.
- Type K-3 tip and mixer assembly for medium soldering.
- Type K-4 tip and mixer assembly for heavy soldering.
- Type K-5 soldering iron stem complete with type K-6 soldering copper.

No. 258-H Prest-O-Lite tank unions for style B (40 ft.) and E (30 ft.) tanks.

No. 257-H Prest-O-Lite tank union for style MC (10 ft.) tank. Type K-8 Torch handle.

No. 305-H-6 (6 ft. length) red acetylene hose.

No. 17922 Hose clamp.

Snap lock metal carrying case.

No. 32 Hi-Duty Outfit. Each\$8.95

No. 34 Hi-Duty Outfit. Same as No. 32, except without soldering iron. Each 6.50



No. 33 OUTFIT

The No. 33 is especially suited for installation of solder fittings. Concentrated flame can be directed evenly, assuring a thorough spread of solder without overheating any part of fitting. Regulator holds gas at a uniform working pressure, and the needle valve added to torch handle permits gas to be turned on or off conveniently.

The No. 33 outfit consists of:

- Type K-9 Torch handle with needle valve.
- Type K-4 tip and mixer assembly for heavy soldering.
- Type 9-R Constant pressure regulator.

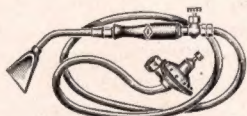
No. 305H-15 (15 ft. length) red acetylene hose.

No. 211-H x $\frac{3}{8}$ " hose connection.

No. 17922 Hose clamp.

No. 33 Outfit. Each\$8.50

No. 35 PAINT BURNING OUTFIT



The No. 35 outfit will thoroughly remove all paint, from wood, steel, etc., leaving surface clean and ready for resurfacing, with no acid or sooty blotches to affect the new paint. By means of the needle valve the length of the flame can be varied. This outfit can be used indoors as well as outdoors.

The No. 35 outfit consists of:

- Type K-15 Burner consists of K-9 torch handle with needle valve and type K-7 flame spreader, stem and mixer.
- Type 9-R Pressure Regulator.
- No. 211-H** x $\frac{3}{8}$ " Hose connection.
- No. 17922** Hose clamp.

No. 35 Paint Burning Outfit. Each\$9.50
(Hose is not included. Order No. 305-H $\frac{3}{8}$ " I.D. corrugated red hose in length desired.)

PAINT BURNER

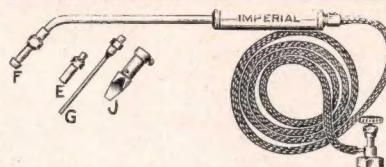
The fastest and best equipment for removing paint from wood, steel, etc. Leaves surface clean and ready for resurfacing. Type 9-R Pressure Regulator must be used with burner. This is important.

No. K-15 Burner Complete. Each\$4.95

No. K-7 Flame spreader, stem and mixer. Each 2.25

Flame spreader and stem only. Each 1.25

Mixer for stem. Each 1.00



No. 30 AND 31 OUTFITS

The No. 31 is an ideal outfit for radiator work and for all kinds of soldering, brazing and light preheating work in garages, repair shops, etc. Torch burns acetylene, and the tips draw in the necessary oxygen from the atmosphere. Tank connection fits the small Presto automobile acetylene light tank, but can be used on large size cylinders by means of an adapter.

Consists of Type AO Torch, 4 tips (one long spout for radiator soldering), 6-ft Hose and Needle Shut-Off Valve.

No. 31 Outfit. Price\$7.00

No. 30 Outfit is the same as No. 31 excepting that it does not have the J soldering iron and needle shut-off valve, is furnished with tank connection. Price..... 4.50

TORCH HANDLE



Type K-9 Torch handle with needle valve and hose connection. Each\$2.60

Type K-8 Torch handle without needle valve and hose connection. Each 1.00

TORCH TIPS WITH MIXER ASSEMBLIES

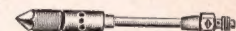
	Price Each	
Type K-1 Tip with Mixer Assembly, for fine soldering	\$1.75	
Type K-2 Tip with Mixer Assembly, for light soldering	1.90	
Type K-3 Tip with Mixer Assembly, for medium soldering	1.90	
Type K-4 Tip with Mixer Assembly, for heavy soldering	1.90	



STEMS ONLY LESS MIXER ASSEMBLIES

No.	Price Each
K1-S Stem only (less mixer assembly) for type K-1 tip..	\$0.75
K2-S Stem only (less mixer assembly) for type K-2 tip..	.90
K3-S Stem only (less mixer assembly) for type K-3 tip..	.90
K4-S Stem only (less mixer assembly) for type K-4 tip..	.90

SOLDERING IRON STEM COMPLETE WITH SOLDERING COPPER



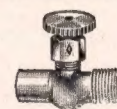
	Price Each
Type K-5 Soldering iron stem complete with stem, sleeve, mixer and type K-6 soldering copper	\$2.75
Stem and sleeve assembly .....	.75
Sleeve only .....	.40
Type K-6 Soldering copper only	1.00



MIXER ASSEMBLIES

	Price Each
K1-M Mixer assembly for type K-1 tip	\$1.00
K2-M Mixer assembly for type K-2 tip	1.00
K3-M Mixer assembly for type K-3 tip	1.00
K4-M Mixer assembly for type K-4 tip	1.00
K5-M Mixer assembly for type K-5 soldering iron	1.00

NEEDLE VALVES



No. 33490 Needle Valve for type K-9 torch handle. Each..\$1.25

IMPERIAL HALIDE GAS LEAK DETECTOR

The Imperial Halide Gas Leak Detector is a positive detector of non-combustible gases in refrigerating and air conditioning units.

It connects to the type K-9 Imperial Torch handle and to standard handles of other make soldering torches. The hose which slips over the inlet tube is used to locate the leak of chlorinated refrigerants that are non-combustible, such as Freon and Carrene. A leak turns the flame from a blue color to green.

UNDER NO CIRCUMSTANCES SHOULD ANY FLAME LEAK DETECTOR BE USED FOR LOCATING LEAKS OR ANY COMBUSTIBLE GAS.

The Imperial Halide Gas Leak Detector, cannot, of course, be used with ordinary refrigerant gases such as Carbon Dioxide and Sulphur Dioxide, because these gases do not cause a flame color change, the basis of its action.

Type K-10 Imperial Halide Gas Leak Detector only, without hose. Price Each\$2.75

No. 161C-4 Rubber Hose for use on Gas Leak Detector. (4 ft. length)44

No. 39 IMPERIAL HALIDE GAS LEAK DETECTOR OUTFIT

Provides complete equipment (with the exception of the Prest-O-Lite tank) for locating leaks of non-combustible chlorinated refrigerants. The Imperial Halide Gas Leak Detector is a positive detector of non-combustible gases in refrigerating and air conditioning units.

Imperial No. 39 Outfit Consists of:

- Type K-10 Halide Gas Leak Detector.
- No. 161C-4 (4 ft. length) rubber hose.
- No. 17922 Hose clamp.
- Type K-9 Torch handle with needle valve.
- No. 34529 MC tank-to-torch adapter.

No. 39 Imperial Halide Gas Leak Detector Outfit. Price \$6.50

No. 37 Imperial Halide Gas Leak Detector Outfit, same as No. 39 Outfit excepting has No. K-14 Handle for MC tank. Price 7.50

No. K-14 MC Tank Handle Assembly. Price 1.00

No. 40 IMPERIAL HALIDE GAS LEAK DETECTOR OUTFIT

The Imperial Halide Leak Detector can be connected to the Prest-O-Lite tank with a hose for testing in places where space is limited. In this case it is absolutely necessary that a 9R Pressure Regulator be used as shown in the illustration. This prevents subjecting the hose to full cylinder pressure.

Imperial No. 40 Outfit consists of:

- Type K-10 Halide gas leak detector.
- No. 161C-4 (4 ft. length) Rubber hose for attaching to leak detector.
- Type K-9 Torch handle with needle valve.
- No. 305H-6 (6 ft. length) corrugated red hose with
- No. 211-H x $\frac{1}{8}$ " hose connection for attaching to torch handle and regulator.
- 2 No. 17922 Hose clamps.
- Type 9-R Regulator.

No. 40 Imperial Halide Gas Leak Detector Outfit. Price \$11.75

TYPE 9-R PRESSURE REGULATOR

The type 9-R pressure regulator automatically holds the gas at uniform line pressure whether the tank is full or nearly empty. It permits the turning on or off of the gas without disturbing the tank valve. Insures economical gas consumption under all operating conditions.

Fits directly to the type B, 40-ft. Prest-O-Lite tank, but can be used with an MC tank by means of a No. 273-H adapter.

Type 9-R Pressure Regulator. Each\$5.00

No. 36 SOLDERING IRON OUTFIT

The No. 36 is recommended for fine soldering, such as all types of electrical work in refrigeration, air conditioning, telephone switchboard,

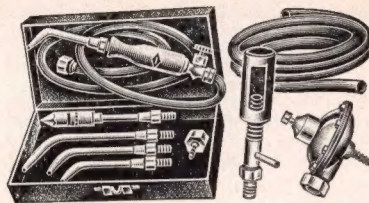
automotive and radio.

Type K-8 Torch handle. Type K-5 Soldering iron stem.

Type 9-R Pressure regulator. 2 No. 17922 Hose clamps.

No. 305H-6 (6 ft. length) red acetylene hose.

No. 36 Soldering Iron Outfit. Each\$9.00



No. 38 IMPERIAL HALIDE LEAK DETECTOR OUTFIT

The Imperial Halide Gas Leak Detector can be converted into a Torch for soldering, brazing and heating. Simply remove

the type K-10 Gas Leak Detector and insert any tip for fine, light, medium and heavy soldering, brazing and heating.

In order to prevent subjecting the hose to full cylinder pressure, the type 9-R Regulator must be used.

Imperial No. 38 Outfit Consists of:

- Type K-9 Torch handle with needle valve.
- Type K-10 Halide gas leak detector.
- No. 161C-4 (4 ft. length) Rubber hose for attaching to leak detector.
- No. 305H-6 (6 ft. length) red acetylene hose with No. 211-H x $\frac{1}{8}$ " connection, for attaching to torch handle.
- 2 No. 17922 Hose clamps.
- 1 Each Types K-1, K-2, K-3, K-4 soldering tips.
- Type K-5 soldering iron stem complete with type K-6 soldering copper.
- Type 9-R Regulator.

No. 38 Imperial Halide Gas Leak Detector and Soldering and Brazing Outfit. Price each\$20.50

REPAIR PARTS FOR GAS LEAK DETECTORS



Flame Shield Assembly



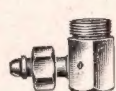
Air Mixer Assembly



Type K-13
Copper Reaction Plate



Adapter
No. 34529



No. 273-H
Adapter

Type K-12 Flame Shield Assembly. Price\$1.00

Type K-11 Air Mixer Assembly. Price 2.00

Type K-13 Copper Reaction Plate. Price15

Type K-13A Reaction Plate. New Style. Price35

No. 34529 MC tank-to-torch adapter. Price75

No. 273-H MC tank-to-regulator adapter. Price 2.00



No. 257-H



No. 258-H



No. 17922



No. 305-H

No. 258-H Prest-O-Lite tank unions for style A, B or E tanks. Each\$0.35

No. 257-H Prest-O-Lite tank union for style MC tank. Each35

No. 305-H $\frac{1}{8}$ " I.D. corrugated red hose less connections. In less than 50 foot lengths. Price per ft.14

In lengths of 50 to 99 feet, less connections. Per ft.12

100 feet or more, less connections. Per Ft.11

No. 17922 Hose clamp. Each06

No. 211-H $\frac{1}{8}$ " Hose connection. Each24

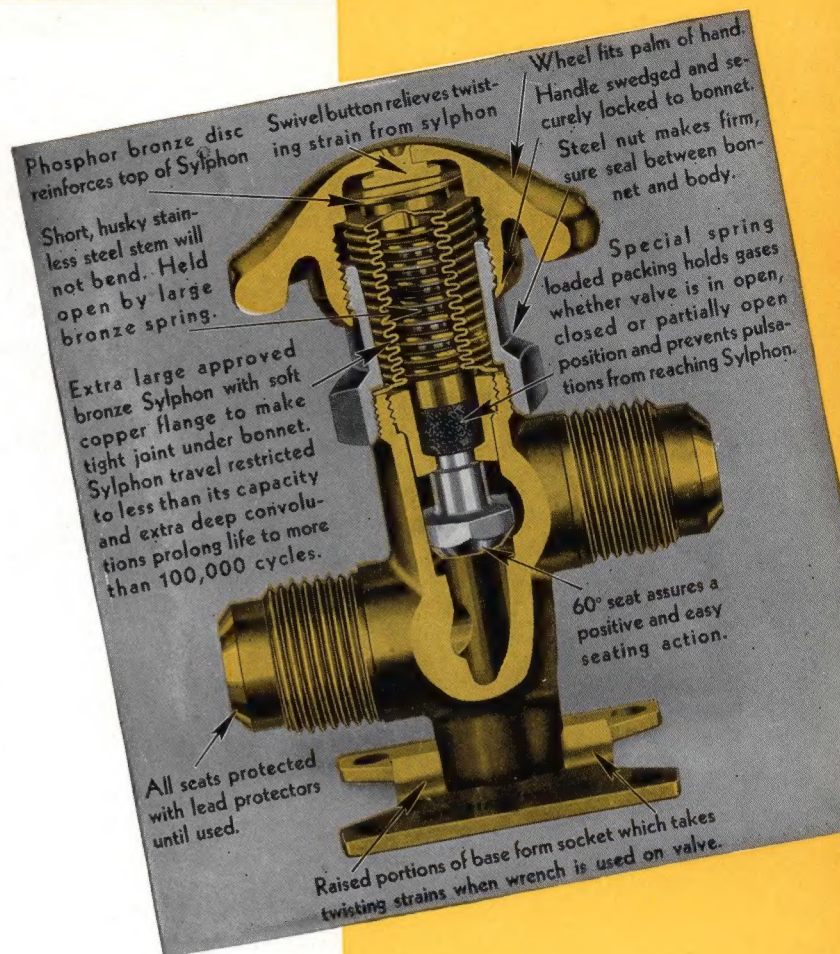
USE IMPERIAL SYLPAK VALVES!

USE Sylpak valves for the same reason that refrigeration and air conditioning men everywhere are using them—because they provide the double security of the Sylphon plus a good spring loaded packing at a cost no greater than ordinary packless valves.

Take a look at the sectional view of this valve. Note the sturdy compactness of the Sylpak valve . . . the short husky stainless steel stem . . . the extra large Sylphon that withstood more than 100,000 openings and closings under test in the Underwriters Laboratories.

Here is a valve that stays tight under every operating condition. It stands up under pulsations, vibration, excess pressure and can be used with any refrigerant except ammonia.

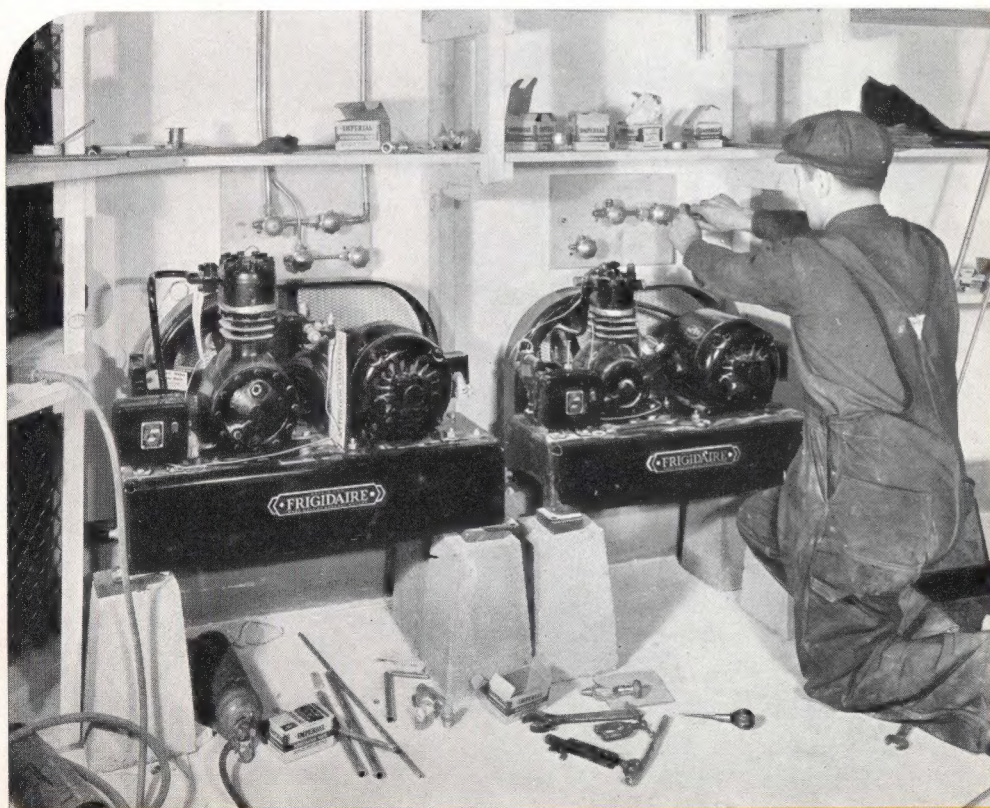
With ordinary valves a certain amount of seepage may take place after the valve becomes slightly worn. The annoyance from fumes as well as the possibility of property damage in certain types of installations, has brought about a very definite demand for a valve that would afford positive protection against such leakage under every operating condition. The Imperial Sylpak valve entirely eliminates any possibility of such seepage troubles even with the most penetrating types of refrigerants.



- Imperial Sylpak Valves are available for tube diameters from $\frac{1}{4}$ " to $\frac{3}{4}$ " for S. A. E. flare or solder fittings as desired. Sylphon type valves can also be furnished in sizes up to $1\frac{1}{2}$ " female I.P.T. and $1\frac{5}{8}$ " O.D. tube size.

All flared ends on Sylpak Valves will be made with Triple Seal Flare Connections.

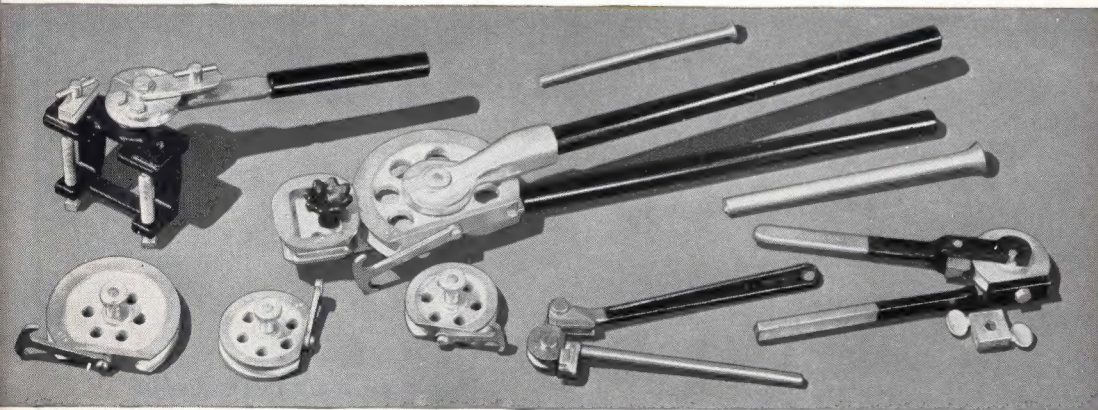
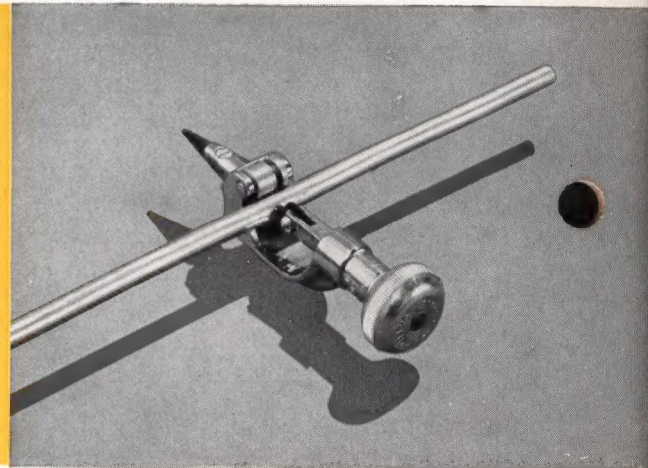
- These two compressor units are a part of a battery of fourteen that are installed in one of the world's largest and most modern drug stores on State Street in Chicago. The contractor chose Sylpak valves because of the double security of the sylphon and the spring loaded packing.



You can improve your tubing connection work with IMPERIAL TOOLS

TUBE CUTTERS

- With Imperial tube cutters you can cut any kind of tubing ranging from 3/16" to 2 1/4" O.D. quickly and cleanly without flattening the tubing. Also designed so old flares can be removed.

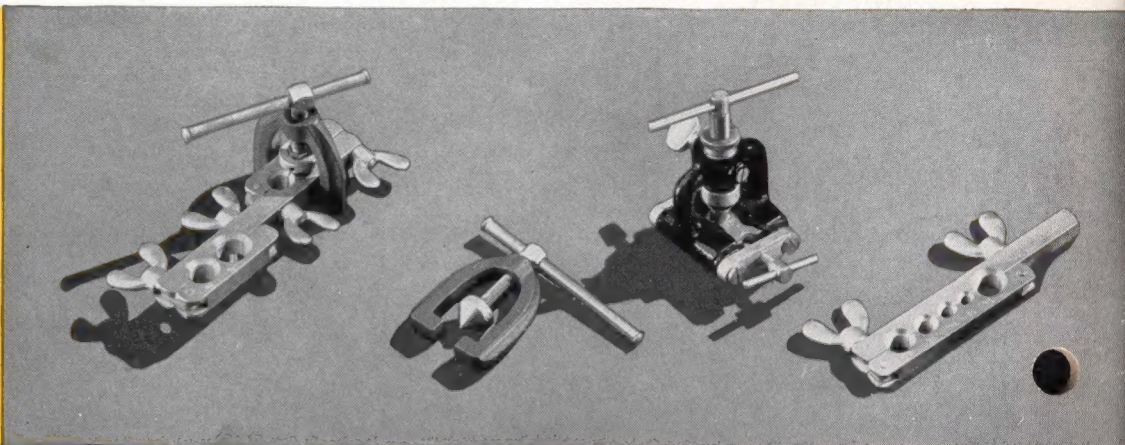


TUBE BENDERS

- Imperial tube benders are so inexpensive that every service man should have at least two types in his kit. You can get exactly what you need whether your work calls for spring type benders, heavy duty types or a bender that will also make coils. Ask your jobber about Imperial tube benders or write for catalog.

FLARING TOOLS

- With an Imperial flaring tool you make exactly the right type of S. A. E. flared joint so that you can be absolutely certain of a tight connection. Self centering yoke . . . No danger of cracking or splitting tube. Equip yourself with one of these inexpensive flaring tools for handling copper, brass or aluminum tubing work.



THE IMPERIAL BRASS MFG. CO., 1200 W. Harrison Street, Chicago, Ill., U. S. A.